



SEQUENCE LISTING

110 Graff, Jonathon M.
Muenster, Matthew

<120> METHODS TO IDENTIFY SIGNAL SEQUENCES

<130> A34943 090495.0243

<140> 10/002,631

<141> 2001-10-31

<150> 60/300,309

<151> 2001-06-21

<160> 324

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 884

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (608)...(884)

<223> n = A, C, G or T

<400> 1

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aatcccacca atcttcatgg gtaaactttc ctgctcaggg atgtaagctg actctagacc 120
atctcgcggt tcctgcggat agcacagcac aagatcatac tgaagatcat gccaaatata 180
atgaccacgg caatgccgat gccactgcg ccatgatgtt ggaatttatt gtcgaagacc 240
tctttgatgg catcaggaca ggacttcacg gtgaagggtt cgagtacgtc cttcttgggg 300
cagatgtctg agataaactg ttccacgccc ccagccaaac cacagcagtt caacgcatag 360
tggtatggct tcagcggttc ccgctggggc tcatccttgg ttttcagctt gttgtagggtg 420
tccttgtaaa actcctggac ttccttaatc acctcatcct tgtgggaata tccccagatg 480
gccgcagcta tttcaatggc gaatatcacc aagaggaagc ccgaagaaca gtcccagcat 540
gcaactgggac tcctgcacag ccccgagca gccaggaag cccaccagca tcatgagggc 600
gccggctnec atcagaatat agactcctgt gtagaagctg gaattattat tattaagttt 660
cttgctcgaa gatgctcttg gnetgagagt cgaatcgga cccttagtca atggcaagga 720
cagnaattcc cgggnaaggc ccnaannaag aannttaaag cccgaacaag natggtattt 780
gntncccttt ggggcctnec tttntaccgg nnttttgtna nggnntnact taancnggg 840
ccnaacggg ttccggnant tgggggncnc ccccnantn ngnn 884
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<210> 2

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (1)...(93)

<223> Xaa = Any amino acid

<400> 2

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Xaa | Xaa | Xaa | Gly | Xaa | Xaa | Pro | Xaa | Xaa | Arg | Asn | Pro | Xaa | Gly | Pro | Xaa | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Xaa | Lys | Xaa | Xaa | Xaa | Xaa | Lys | Xaa | Pro | Val | Xaa | Xaa | Xaa | Ala | Pro | Lys | |
| | | | 20 | | | | | 25 | | | | | 30 | | | |
| Gly | Xaa | Lys | Tyr | His | Xaa | Cys | Ser | Gly | Phe | Xaa | Xaa | Leu | Xaa | Xaa | Gly | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Leu | Xaa | Arg | Glu | Xaa | Leu | Ser | Leu | Pro | Leu | Thr | Lys | Gly | Ser | Asp | Ser | |
| | 50 | | | | | 55 | | | | | 60 | | | | | |
| Thr | Leu | Xaa | Pro | Arg | Ala | Ser | Ser | Ser | Lys | Lys | Leu | Asn | Asn | Asn | Asn | |
| 65 | | | | 70 | | | | | 75 | | | | | | 80 | |
| Ser | Ser | Phe | Tyr | Thr | Gly | Val | Tyr | Ile | Leu | Ile | Xaa | Ala | Gly | Ala | Leu | |
| | | | 85 | | | | | 90 | | | | | 95 | | | |
| Met | Met | Leu | Val | Gly | Phe | Leu | Gly | Cys | Cys | Gly | Ala | Val | Gln | Glu | Ser | |
| | | | 100 | | | | 105 | | | | | | 110 | | | |
| Gln | Cys | Met | Leu | Gly | Leu | Phe | Phe | Gly | Leu | Pro | Leu | Gly | Asp | Ile | Arg | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| His | Asn | Ser | Cys | Gly | His | Leu | Gly | Ile | Phe | Pro | Gln | Gly | Gly | Asp | Gly | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Ser | Pro | Gly | Val | Leu | Gln | Gly | His | Leu | Gln | Gln | Ala | Glu | Asn | Gln | Gly | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Ala | Pro | Ala | Gly | Asn | Ala | Glu | Ser | His | Pro | Leu | Cys | Val | Glu | Leu | Leu | |
| | | | 165 | | | | | | 170 | | | | | 175 | | |
| Trp | Phe | Gly | Trp | Gly | Arg | Gly | Thr | Val | Tyr | Leu | Arg | His | Leu | Pro | Gln | |
| | | 180 | | | | | | 185 | | | | | 190 | | | |
| Glu | Gly | Arg | Thr | Arg | Asn | Leu | His | Arg | Glu | Val | Leu | Ser | Cys | His | Gln | |
| | | 195 | | | | 200 | | | | | | 205 | | | | |
| Arg | Gly | Leu | Arg | Gln | Ile | Pro | His | His | Arg | Arg | Ser | Gly | His | Arg | His | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |
| Cys | Arg | Gly | His | Asp | Ile | Trp | His | Asp | Leu | Gln | Tyr | Asp | Leu | Val | Leu | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| Cys | Tyr | Pro | Gln | Glu | Pro | Arg | Asp | Gly | Leu | Glu | Ser | Ala | Tyr | Ile | Pro | |
| | | | 245 | | | | | 250 | | | | | 255 | | | |
| Glu | Gln | Glu | Ser | Leu | Pro | Met | Lys | Ile | Gly | Gly | Ile | Phe | Cys | Leu | Phe | |
| | | | 260 | | | | | 265 | | | | | 270 | | | |
| Val | Leu | Phe | Cys | Leu | Leu | Phe | Val | Val | Cys | Phe | Phe | Ala | Thr | Gly | Ser | |
| | | 275 | | | | | 280 | | | | | 285 | | | | |

<210> 3

<211> 529

<212> DNA

<213> Homo sapiens

<400> 3
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gggaagacaa aagcaacaag ctcagggctg acatcaagat acctcccaga aagaggtagc 120
tacggcgcct ggcatagagt gcactgaggg tgaagcaggt aaagatcatt gccgtgccca 180
tgaaagcagt gggaaggatg ctgggggttg cagcaataca aaactccagg gcagggccca 240
ggccaactcc tgtaaggaat gcaaattccag caagaagtcc cagtcttttc tgttcagttt 300
catggctatg aggtgttgcc atcagccaaa tcatcaatat cagggagccc aaggcagaca 360
gcaggccagc ctgaatgaaa tgagtgacca tatggacata ggcccctgca gccgccacaa 420
acatacaaag ggcaaaactt gcatagacct tcttcaggtg ctgctgcgtt gacgggggta 480
tatgagaaaa ttttaaaagc gcatcaaagg tcgacgcggc cgcgaattc 529

<210> 4

<211> 162

<212> PRT

<213> Homo sapiens

<400> 4
Glu Phe Ala Ala Ala Ser Thr Phe Asp Ala Leu Leu Lys Phe Ser His
1 5 10 15
Ile Thr Pro Ser Thr Gln Gln His Leu Lys Lys Val Tyr Ala Ser Phe
20 25 30
Ala Leu Cys Met Phe Val Ala Ala Ala Gly Ala Tyr Val His Met Val
35 40 45
Thr His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu Gly Ser Leu Ile
50 55 60
Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His Glu Thr Glu Gln
65 70 75 80
Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu Thr Gly Val Gly
85 90 95
Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn Pro Ser Ile Leu
100 105 110
Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr Cys Phe Thr Leu
115 120 125
Ser Ala Leu Tyr Ala Arg Arg Arg Ser Tyr Leu Phe Leu Gly Gly Ile
130 135 140
Leu Met Ser Ala Leu Ser Leu Leu Leu Leu Ser Ser Leu Gly Asn Val
145 150 155 160
Phe Phe

<210> 5

<211> 454

<212> DNA

<213> Homo sapiens

<400> 5
ggatccgggc caaaaaaat aaacagcaac ttcataagaca aaaaaggaaa aaaaaagaaa 60
ccttttatct ttggcctttt taaccatctc atacaaacca actacttata gtacagctaa 120

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gtacatacac aaaaaagtta ctggaatgct cggaataaga ttgtttttct gttgtcattt 180
ttgctttttt tacaagggtt tttttctcct ttgagattat aatgaacatg gtcacaccac 240
aagtaaagtc agaagtagga cagagaacgc tccgaaggct ggtttggtca tccgagatca 300
ttaaaaaatgg ctgaccctaa caatatgtac aaaaatataa aatgtaaata aaaaatacaa 360
acaaatttcc tttttaagat actttaagaa aaaaagcagg gccttggaag ttttggttct 420
tttttcctcc cctggtcgac gcggccgcga attc 454

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<210> 6
 <211> 144
 <212> PRT
 <213> Homo sapiens

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<400> 6
Asn Ser Arg Pro Arg Arg Pro Gly Glu Glu Lys Arg Thr Lys Thr Ser
 1           5           10           15
Lys Ala Leu Leu Phe Phe Leu Lys Tyr Phe Lys Lys Glu Ile Cys Leu
          20           25           30
Tyr Phe Leu Phe Thr Phe Tyr Ile Phe Val His Ile Val Arg Val Ser
          35           40           45
His Phe Ser Arg Met Thr Lys Pro Ala Phe Gly Ala Phe Ser Val Leu
          50           55           60
Leu Leu Thr Leu Leu Val Val Pro Cys Ser Leu Ser Gln Arg Arg Lys
65          70          75          80
Lys Thr Leu Lys Lys Gln Lys Gln Gln Lys Asn Asn Leu Ile Pro Ser
          85          90          95
Ile Pro Val Thr Phe Leu Cys Met Tyr Leu Ala Val Leu Val Val Gly
          100         105         110
Leu Tyr Glu Met Val Lys Lys Ala Lys Asp Lys Arg Phe Leu Phe Phe
          115         120         125
Ser Phe Phe Val Tyr Glu Val Ala Val Tyr Phe Phe Trp Pro Gly Ser
          130         135         140

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<210> 7
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<400> 7
ggatccaagc atcaggagca ggcaaggaga accaaaagac atcaagaaac cgatttgctt 60
gagaaaagca gcgattcttc ctttcagagt tctccatggc tcagaaaatg cccaagacat 120
catgtatgtg acttagatac tgcttttttg gaggttaaga gtagcatgaa gaacttaaga 180
tgacgataag agtctaaatt tttagtttca aggtttcaat agaatgtgga tatattcaaa 240
actttcaaaa aggacagtgt ttagaaaggg taaaactagg acacagaaaa cactgggaat 300
taccacgacc cccaagtgct tccggctcca ggaaataacc attcatgtgt ttgctggagg 360
tcacacaatt ttcccctatt acctggtgca aaatgactca tcaattccca aaagcttctt 420
ttcaaaccac gattttccca tttattttgg tccaatgcgt cgacgcggcc gcgaattc 478

```

<210> 8
 <211> 150

<212> PRT

<213> Homo sapiens

<400> 8

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Arg | Ile | Gly | Pro | Lys | Met | Gly | Lys | Ser | Trp |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Phe | Glu | Lys | Lys | Leu | Leu | Gly | Ser | Asp | Glu | Ser | Phe | Cys | Thr | Arg | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Lys | Ile | Val | Pro | Pro | Ala | Asn | Thr | Met | Val | Ile | Ser | Trp | Ser | Arg | Lys |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| His | Leu | Gly | Val | Val | Val | Ile | Pro | Ser | Val | Phe | Cys | Val | Leu | Val | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Pro | Phe | Leu | Asn | Thr | Val | Leu | Phe | Glu | Ser | Phe | Glu | Tyr | Ile | His | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Leu | Lys | Pro | Asn | Lys | Phe | Arg | Leu | Leu | Ser | Ser | Ser | Val | Leu | His |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | Thr | Leu | Asn | Leu | Pro | Lys | Ser | Ser | Ile | Val | Thr | Tyr | Met | Met | Ser |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Trp | Ala | Phe | Ser | Glu | Pro | Trp | Arg | Thr | Leu | Lys | Gly | Arg | Ile | Ala | Ala |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Phe | Leu | Lys | Gln | Ile | Gly | Phe | Leu | Met | Ser | Phe | Gly | Ser | Pro | Cys | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Leu | Met | Leu | Gly | Ser | | | | | | | | | | |
| 145 | | | | | 150 | | | | | | | | | | |

<210> 9

<211> 770

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (545)...(757)

<223> n = A, C, G or T

<400> 9

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
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| gttgagttgg | tccagccctg | ggctgacaag | ggtgagatct | gcctgaccct | ctccagtggag | 120 |
| agtaactcca | gtcacttccc | ctgccacgtc | ccaggtgcct | agggaggcag | tcaggttcac | 180 |
| ctggtatacc | tcctgaccag | aagctgcctg | aaggctcagc | cctggcacca | agatgctcct | 240 |
| gaggggctga | acttccacac | cctgtagggg | gtactggagc | ggggagttgg | caggggctat | 300 |
| gagcagctgg | tcagctgggg | actggctcct | cgacagaaag | gcctggaact | cctgctctct | 360 |
| tgtggcagag | gcagccctca | gctctgcagg | gtcaaaggcc | ttggtgaggt | caatagctcg | 420 |
| gacttgtttc | tggaagggga | gggggaggcc | ccccccactg | gactcacaac | tgcagttggt | 480 |
| ccaagccagc | agccccacta | cttgctcctt | gacccctgacc | gggatgtgtg | cctagcgggg | 540 |
| ctcangagca | agatctggca | gctcgggcct | gcgggggctt | tgcgggggcg | cccacggcgc | 600 |
| aagaagtacc | cggangcccg | ggcgccgtnc | cgggtgctcg | cgtacaggan | ccccancgag | 660 |
| gccaagccna | ccagaaggac | caaaacgcac | aagggcccg | cgggccaacc | acatcctgct | 720 |
| aacctntaag | gacggcaaaa | ttcggncggg | ctntnancgg | gccggaatta | | 770 |

<210> 10
 <211> 255
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (5)...(75)
 <223> Xaa = Any amino acid

<400> 10
 Ile Pro Ala Gly Xaa Xaa Pro Xaa Arg Ile Leu Pro Ser Leu Xaa Val
 1 5 10 15
 Ser Arg Met Trp Leu Ala Arg Arg Ala Leu Val Arg Phe Gly Pro Ser
 20 25 30
 Gly Xaa Leu Gly Leu Xaa Gly Xaa Pro Val Arg Glu His Pro Xaa Arg
 35 40 45
 Arg Pro Gly Xaa Arg Val Leu Ala Pro Trp Ala Pro Pro Gln Ser
 50 55 60
 Pro Arg Arg Pro Glu Leu Pro Asp Leu Ala Xaa Glu Pro Arg Ala His
 65 70 75 80
 Ile Pro Val Arg Ile Lys Glu Gln Val Val Gly Leu Leu Ala Trp Asn
 85 90 95
 Asn Cys Ser Cys Glu Ser Ser Gly Gly Gly Leu Pro Leu Pro Phe Gln
 100 105 110
 Lys Gln Val Arg Ala Ile Asp Leu Thr Lys Ala Phe Asp Pro Ala Glu
 115 120 125
 Leu Arg Ala Ala Ser Ala Thr Arg Glu Gln Glu Phe Gln Ala Phe Leu
 130 135 140
 Ser Arg Ser Gln Ser Pro Ala Asp Gln Leu Leu Ile Ala Pro Ala Asn
 145 150 155 160
 Ser Pro Leu Gln Tyr Pro Leu Gln Gly Val Glu Val Gln Pro Leu Arg
 165 170 175
 Ser Ile Leu Val Pro Gly Leu Ser Leu Gln Ala Ala Ser Gly Gln Glu
 180 185 190
 Val Tyr Gln Val Asn Leu Thr Ala Ser Leu Gly Thr Trp Asp Val Ala
 195 200 205
 Gly Glu Val Thr Gly Val Thr Leu Thr Gly Glu Gly Gln Ala Asp Leu
 210 215 220
 Thr Leu Val Ser Pro Gly Leu Asp Gln Leu Asn Arg Gln Leu Gln Leu
 225 230 235 240
 Val Thr Tyr Ser Ser Arg Ser Tyr Gln Thr Asn Thr Ala Gly Ser
 245 250 255

<210> 11
 <211> 480
 <212> DNA
 <213> Homo sapiens

<400> 11

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ggatcctggg ggggggggagt aggtctcctc ggccatctca gaggtgggtg gtcctcgtg 60
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cccgcggccg tgcagcaggg cgtgcagcgg cttctcctcg tcctgccggg ggaggcagcg 180
cagcccctgg gcgcagcgct cgggtgtagac gccgcacgac tgcccctcgg ccagggcgca 240
ggtcatgcag cagccgcagc cgggctcctt gaccagctcg cagcccaggg ggctgggggg 300
gcacatggag agggctttct cgtcgcaggg ctcgcagtgc acgaaggagc ccaggctctg 360
ggccggcccc gcataggcgg ccagcagcag gaggaccgcg gtgagcaaca ccatcttctc 420
ttagtcgccc cctttacctc ggggtggggc aggaaaagcg gtcgacgcgg ccgcgaattc 480
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<210> 12

<211> 159

<212> PRT

<213> Homo sapiens

<400> 12

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Glu Phe Ala Ala Ala Ser Thr Ala Phe Pro Ala Pro Pro Arg Gly Lys
 1           5           10           15
Gly Gly Asp Glu Lys Met Val Leu Leu Thr Ala Val Leu Leu Leu Leu
 20           25           30
Ala Ala Tyr Ala Gly Pro Ala Gln Ser Leu Gly Ser Phe Val His Cys
 35           40           45
Glu Pro Cys Asp Glu Lys Ala Leu Ser Met Cys Pro Pro Ser Pro Leu
 50           55           60
Gly Cys Glu Leu Val Lys Glu Pro Gly Cys Gly Cys Cys Met Thr Cys
65           70           75           80
Ala Leu Ala Glu Gly Gln Ser Cys Gly Val Tyr Thr Glu Arg Cys Ala
 85           90           95
Gln Gly Leu Arg Cys Leu Pro Arg Gln Asp Glu Glu Lys Pro Leu His
100           105           110
Ala Leu Leu His Gly Arg Gly Val Cys Leu Asn Glu Lys Ser Tyr Arg
115           120           125
Glu Gln Val Lys Ile Glu Arg Asp Ser Arg Glu His Glu Glu Pro Thr
130           135           140
Thr Ser Glu Met Ala Glu Glu Thr Tyr Ser Pro Pro Pro Gly Ser
145           150           155
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<210> 13

<211> 949

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (527)...(945)

<223> n = A, C, G or T

<400> 13

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acaaaaccac acaaaccaaa ccgtcaacag cataataaaa tccaacaac tatttttatt 120
tcatttttca tgcacaacct ttccccagc gcaaaagact gttactttat tattgtattc 180
aaaattcatt gtgtatatta ctacaaagac aaccccaaac caattttttt cctgcgaagt 240
ttaatgatcc acaagtgtat atatgaaatt ctctccttc cttgcccccc tctctttctt 300
ccctctttcc cctccagaca ttctagtttg tggagggtta tttaaaaaaa caaaaaagga 360
agatgggtcaa gtttgtaaaa tatttgtttg tgctttttcc ccctccttac ctgaccccct 420
acgagtttac aggtctgtgg caatactctt aaccataaga attgaaatgg tgaagaaaca 480
agtatacact agaggctctt aaaagtattg aaagacaata ctgctgntat atagcaagac 540
ataaacagat tataaacatc agagccattt gcttctcagt ttacatttct gatacatgca 600
gatagcagat gtcttttaaa gaaatacatg tatattgngt atggacttaa ttatgcacat 660
gctcagatgt gtagacatcc tncgnatatt tacataacat atngaggtaa tagatagggg 720
gatatacctg gatncattct caaganattg cttggaccga aggttncaag gaccccaaac 780
cctttggggc ttttttacc ccaanatggn cttggggaat caaatcctt nnggaaatgg 840
nccttnaana aacttngntt ttttgcnttt tgaaaaaagg ccatgggnca ttggnanttn 900
nggngggccn ccttancccc tttaaaatta nnnttctntt tggngngct 949
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<210> 14

<211> 305

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (2)...(135)

<223> Xaa = any amino acid

<400> 14

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Ala Xaa Gln Xaa Glu Xaa Phe Arg Gly Gly Gly Pro Pro Xaa Xaa Pro
 1          5          10          15
Met Xaa His Gly Leu Phe Ser Lys Xaa Lys Lys Xaa Lys Phe Xaa Xaa
 20          25          30
Gly Pro Phe Pro Xaa Gly Ile Phe Pro Arg Xaa Xaa Leu Gly Val Lys
 35          40          45
Lys Ala Gln Arg Val Trp Gly Pro Xaa Asn Leu Arg Ser Lys Gln Xaa
 50          55          60
Leu Glu Asn Xaa Ser Arg Tyr Ile Pro Leu Ser Ile Thr Ser Ile Cys
 65          70          75          80
Tyr Val Asn Xaa Arg Arg Met Ser Thr His Leu Ser Met Cys Ile Ile
 85          90          95
Lys Ser Ile Xaa Asn Ile His Val Phe His Leu Lys Thr Ser Ala Ile
 100          105          110
Cys Met Tyr Gln Lys Cys Lys Leu Arg Ser Lys Trp Leu Cys Leu Ser
 115          120          125
Val Tyr Val Leu Leu Tyr Xaa Ser Ser Ile Val Phe Gln Tyr Phe Glu
 130          135          140
Pro Leu Val Tyr Thr Cys Phe Phe Thr Ile Ser Ile Leu Met Val Lys
 145          150          155          160
Ser Ile Ala Thr Asp Leu Thr Arg Arg Gly Ser Gly Lys Glu Gly Glu
```


| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | | 165 | | | | | 170 | | | | | 175 | | | |
| Lys | Ala | Gln | Thr | Asn | Ile | Leu | Gln | Thr | Pro | Ser | Ser | Phe | Phe | Val | Phe | | |
| | | | 180 | | | | | | 185 | | | | | 190 | | | |
| Leu | Asn | Asn | Pro | Pro | Gln | Thr | Arg | Met | Ser | Gly | Gly | Glu | Arg | Gly | Lys | | |
| | | 195 | | | | | 200 | | | | | 205 | | | | | |
| Lys | Glu | Arg | Gly | Ala | Arg | Lys | Glu | Glu | Asn | Phe | Ile | Tyr | Thr | Leu | Val | | |
| | 210 | | | | | 215 | | | | | 220 | | | | | | |
| Asp | His | Thr | Ser | Gln | Glu | Lys | Asn | Trp | Phe | Gly | Val | Val | Phe | Val | Val | | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | | |
| Ile | Tyr | Thr | Met | Asn | Phe | Glu | Tyr | Asn | Asn | Lys | Val | Thr | Val | Phe | Cys | | |
| | | | | 245 | | | | | 250 | | | | | 255 | | | |
| Thr | Gly | Gly | Lys | Val | Val | His | Glu | Lys | Asn | Lys | Asn | Ser | Cys | Trp | Asp | | |
| | | | 260 | | | | | 265 | | | | | 270 | | | | |
| Phe | Ile | Met | Leu | Leu | Thr | Val | Trp | Phe | Val | Trp | Phe | Cys | Leu | Leu | Leu | | |
| | | 275 | | | | | 280 | | | | | 285 | | | | | |
| Ile | Phe | Ser | Leu | Leu | Leu | Pro | Ala | Trp | Leu | Cys | Gln | Thr | Asn | Gln | Gly | | |
| | 290 | | | | | 295 | | | | | 300 | | | | | | |
| Ser | | | | | | | | | | | | | | | | | |
| 305 | | | | | | | | | | | | | | | | | |

<210> 15
 <211> 613
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (571)...(571)
 <223> n = A, C, G or T

<400> 15
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 catcattaag gctccgcccg tccaagctat ccagatcgga gggagactgt ggccgagggg 120
 gttcctgctc agtttttggtc ttttttggtg cattggtctc ctactttca ctctctgaga 180
 tctcctcact ccgaccctgc ttgttgacct ttgggggtgga ggcttcctct actcgggcct 240
 tcttggtgtg ctgcctggac ttctcagctt tgccatcact gctggacgtg ctgaccctc 300
 caggggaggg ccggcccctc gatctcagtt cttcccgggg ccagggggc tctttcttcc 360
 gtccactcct cattgacatc gagtctttat tctgtcgtgt cttcattctt caggctgtgg 420
 agacccatt ctctctgccc tgggcagctg aatacagaaa cttctctgct ccaccccaag 480
 ttccccacag ctgtggtctg ggaagcagga tctccaagtt tccagtgtgg gcacctggaa 540
 ctgctggtag ctcgggacgg ctggctggct ncgaaccggg attccgggct tccggcgcct 600
 tctggggggg cgg 613

<210> 16
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 16

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Pro | Pro | Arg | Arg | Arg | Arg | Lys | Pro | Gly | Ile | Pro | Val | Arg | Ser | Gln |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Pro | Ala | Val | Pro | Ser | Tyr | Gln | Gln | Phe | Gln | Val | Pro | Thr | Leu | Glu | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Trp | Arg | Ser | Cys | Phe | Pro | Asp | His | Ser | Cys | Gly | Glu | Leu | Gly | Val | Glu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gln | Arg | Ser | Phe | Cys | Ile | Gln | Leu | Pro | Arg | Gln | Arg | Arg | Met | Gly | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Pro | Gln | Pro | Glu | Glu | Arg | His | Asp | Arg | Ile | Lys | Thr | Arg | Cys | Gln | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Val | Asp | Gly | Arg | Lys | Arg | Pro | Leu | Gly | Pro | Gly | Lys | Asn | Asp | Arg | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | Gly | Pro | Pro | Leu | Glu | Gly | Ser | Ala | Arg | Pro | Ala | Val | Met | Ala | Lys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Arg | Ser | Pro | Gly | Arg | Gln | Pro | Arg | Arg | Pro | Glu | Arg | Lys | Pro | Pro |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Gln | Arg | Ser | Thr | Ser | Arg | Val | Gly | Val | Arg | Arg | Ser | Gln | Arg | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Lys | Val | Arg | Arg | Pro | Met | His | Gln | Lys | Arg | Pro | Lys | Leu | Ser | Arg | Asn |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ser | Leu | Gly | His | Ser | Leu | Pro | Pro | Ile | Trp | Ile | Ala | Trp | Thr | Gly | Gly |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ala | Leu | Met | Met | Met | Ala | Ala | Ala | Thr | Leu | Gly | Ile | Ser | Thr | Arg | Thr |
| | | | 180 | | | | | 185 | | | | | | 190 | |
| Thr | Glu | Ala | Arg | Pro | Pro | Gly | Ser | | | | | | | | |
| | | 195 | | | | | 200 | | | | | | | | |

<210> 17
 <211> 284
 <212> DNA
 <213> Homo sapiens

<400> 17
 ggatccatt cctaccactg tgagtgctaa ataagaagca atgtaccgtt tttccagacc 60
 gtctctaaca ctctgaattg caccgaacat tggaggtata atcatgatca gggtactcac 120
 tgtattccag aactcggcga tgtaccaggt cacggagtag ttctcctcgc accagtccag 180
 cgtggagggtc gtggggcccc agtagccctc tcggtccgcg gccggagcca tcacgccgcc 240
 gccgccgccg cccaggcgct ccgcgtcgac gcggccgcga attc 284

<210> 18
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 18
 Ile Arg Gly Arg Val Asp Ala Glu Arg Leu Gly Gly Gly Gly Gly Gly
 1 5 10 15
 Val Met Ala Pro Ala Ala Asp Arg Glu Gly Tyr Trp Gly Pro Thr Thr
 20 25 30

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Thr | Leu | Asp | Trp | Cys | Glu | Glu | Asn | Tyr | Ser | Val | Thr | Trp | Tyr | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ala | Glu | Phe | Trp | Asn | Thr | Val | Ser | Asn | Leu | Ile | Met | Ile | Ile | Pro | Pro |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Met | Phe | Gly | Ala | Ile | Gln | Ser | Val | Arg | Asp | Gly | Leu | Glu | Lys | Arg | Tyr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ile | Ala | Ser | Tyr | Leu | Ala | Leu | Thr | Val | Val | Gly | Met | | | | |
| | | | | 85 | | | | | 90 | | | | | | |

<210> 19
 <211> 928
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (634)...(919)
 <223> n = A, C, G or T

<400> 19

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|-----|
| ggatccggtt | ggaataagaa | ctttcatcac | cactgctgtc | atctgtaaaa | ctaggattgt | 60 |
| tatctgaata | ttcatcaata | gttgtaggtg | tactactttc | ctcaaaaatg | cttcctctct | 120 |
| cactgtgact | gtgtccattc | attggccttag | gtatagtctg | gcttttaaga | agatgtaaaa | 180 |
| gcaaactatt | gttagcagct | tgttttatat | tgtttctttc | cagtgagttc | ttataacctg | 240 |
| catttttagg | ggaagaagga | atgataccca | ttggattttg | aaacactgta | gcactacttt | 300 |
| tgctagccat | cagtttgctt | gatgatgttc | ttgcctgacc | attaagatgg | cttgacattc | 360 |
| cttttgagg | ctggtaactg | ccaacatcct | tctggccatt | ttcttgcaat | ctggccatag | 420 |
| cagcaagtct | ttcacttgct | gcttgatttg | cattttgctg | ttttaagcg | tggttctcgag | 480 |
| aatactgctg | caaatgggct | tcgcttgaca | gaagtaatgc | taactggcta | caagcaacac | 540 |
| taggtttaag | tgaggtggca | ggactagccc | ttttttccac | catgcttgca | acagcctgta | 600 |
| atcttgacgc | acatgacaac | gggtcactca | tgancctttg | tccactttgt | ccacatgatg | 660 |
| angagactct | gcaacctatc | tctgatgang | gttttagtcn | catcaggaan | attcgaatca | 720 |
| ngcttttgac | cttaacttta | cttttctttc | accaaagntt | ttaagtggac | tgagagccaca | 780 |
| centagcacc | ttaaaacctt | ctcncctttt | aaagaatctg | gctggaggcc | taatccttgn | 840 |
| ttccttgagg | cttttgccng | aattgggtggg | gaccaaacca | ccgnntggna | accctaaacc | 900 |
| ttaaggactg | gaaccaana | aggcccct | | | | 928 |

<210> 20
 <211> 298
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (3)...(93)
 <223> Xaa = any amino acid

<400> 20
 Gly Ala Xaa Leu Gly Ser Ser Pro Gly Leu Gly Xaa Pro Xaa Gly Gly

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Leu | Val | Pro | Thr | Asn | Ser | Gly | Lys | Ser | Leu | Lys | Glu | Xaa | Arg | Ile | Arg | |
| | | | 20 | | | | | 25 | | | | | 30 | | | |
| Pro | Pro | Ala | Arg | Phe | Phe | Lys | Lys | Xaa | Glu | Gly | Phe | Lys | Val | Leu | Xaa | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Cys | Gly | Ser | Ser | Pro | Leu | Lys | Xaa | Phe | Gly | Glu | Arg | Lys | Val | Lys | Leu | |
| | 50 | | | | | 55 | | | | | 60 | | | | | |
| Arg | Ser | Lys | Ala | Phe | Glu | Xaa | Ser | Xaa | Asp | Asn | Xaa | His | Gln | Arg | Val | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | |
| Ala | Glu | Ser | Xaa | His | His | Val | Asp | Lys | Val | Asp | Gln | Xaa | Ser | Val | Thr | |
| | | | | 85 | | | | | 90 | | | | | | 95 | |
| Arg | Cys | His | Val | Leu | Gln | Asp | Tyr | Arg | Leu | Leu | Gln | Ala | Trp | Trp | Lys | |
| | | | 100 | | | | | 105 | | | | | | | | |
| Lys | Gly | Leu | Val | Leu | Pro | Pro | His | Leu | Asn | Leu | Val | Leu | Leu | Val | Ala | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Ser | His | Tyr | Phe | Cys | Gln | Ala | Lys | Pro | Ile | Cys | Ser | Ser | Ile | Leu | Glu | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Asn | Thr | Leu | Lys | Arg | Lys | Met | Gln | Ile | Lys | Gln | Gln | Val | Lys | Asp | Leu | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Leu | Leu | Trp | Pro | Asp | Cys | Lys | Lys | Met | Ala | Arg | Arg | Met | Leu | Ala | Val | |
| | | | | 165 | | | | | 170 | | | | | | 175 | |
| Thr | Ser | Ser | Gln | Lys | Glu | Cys | Gln | Ala | Ile | Leu | Met | Val | Arg | Gln | Glu | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| His | His | Gln | Ala | Asn | Trp | Leu | Ala | Lys | Val | Val | Leu | Gln | Cys | Phe | Lys | |
| | | 195 | | | | | 200 | | | | | 205 | | | | |
| Ile | Gln | Trp | Val | Ser | Phe | Leu | Leu | Pro | Leu | Lys | Met | Gln | Val | Ile | Arg | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |
| Thr | His | Trp | Lys | Glu | Thr | Ile | Asn | Lys | Leu | Leu | Thr | Ile | Val | Cys | Phe | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| Tyr | Ile | Phe | Leu | Lys | Ala | Arg | Leu | Tyr | Leu | Ser | Gln | Met | Asp | Thr | Val | |
| | | | | 245 | | | | | 250 | | | | | 255 | | |
| Thr | Val | Arg | Glu | Glu | Ala | Phe | Leu | Arg | Lys | Val | Val | His | Leu | Gln | Leu | |
| | | | 260 | | | | | 265 | | | | | 270 | | | |
| Leu | Met | Asn | Ile | Gln | Ile | Thr | Ile | Leu | Val | Leu | Gln | Met | Thr | Ala | Val | |
| | | 275 | | | | | 280 | | | | | 285 | | | | |
| Val | Met | Lys | Val | Leu | Ile | Pro | Thr | Gly | Ser | | | | | | | |
| | 290 | | | | | 295 | | | | | | | | | | |

<210> 21

<211> 563

<212> DNA

<213> Homo sapiens

<400> 21

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ggatcctctt aggtctcgca ggctgtctat ggcttgctct ggtgatattg tgtcagacag 60
gtatagtagg agacaagcag ctacaagaca agatctccca agtcctccat agcagtgtat 120
taaggttttt cggtaatttt taaggcaggt tgtaagctct tccattattht cacagcagct 180
ggctatgtca ggagtccttc catctgcgat tggatgatga tgggtgataa ttccacattg 240
ctggtagaga tccagaaggt ttgggactct atattttgac agttcccctc tgggtgcagaa 300

```

aacaaatatg tcttgtatac cacagctctt tagttcttct gtatcttttt ggacatttct 360
tctaacatct ttaaatttac aacctggaag agcacataaa ccgagaaact gagaacaatt 420
cactcgtgac aaagatagcc atgatatatg aattggagtc tgttcattct caataggctc 480
ttcatctgat gagtcaaact cacttgtttg tattgaactg ggcggcttca tcgctggccc 540
gccgtcgacg cggccgcgaa ttc 563

<210> 22
<211> 187
<212> PRT
<213> Homo sapiens

<400> 22
Ile Arg Gly Arg Val Asp Gly Gly Pro Ala Met Lys Pro Pro Ser Ser
1 5 10 15
Ile Gln Thr Ser Glu Phe Asp Ser Ser Asp Glu Glu Pro Ile Glu Asp
20 25 30
Glu Gln Thr Pro Ile His Ile Ser Trp Leu Ser Leu Ser Arg Val Asn
35 40 45
Cys Ser Gln Phe Leu Gly Leu Cys Ala Leu Pro Gly Cys Lys Phe Lys
50 55 60
Asp Val Arg Arg Asn Val Gln Lys Asp Thr Glu Glu Leu Lys Ser Cys
65 70 75 80
Gly Ile Gln Asp Ile Phe Val Phe Cys Thr Arg Gly Glu Leu Ser Lys
85 90 95
Tyr Arg Val Pro Asn Leu Leu Asp Leu Tyr Gln Gln Cys Gly Ile Ile
100 105 110
Thr His His His Pro Ile Ala Asp Gly Gly Thr Pro Asp Ile Ala Ser
115 120 125
Cys Cys Glu Ile Met Glu Glu Leu Thr Thr Cys Leu Lys Asn Tyr Arg
130 135 140
Lys Thr Leu Ile His Cys Tyr Gly Gly Leu Gly Arg Ser Cys Leu Val
145 150 155 160
Ala Ala Cys Leu Leu Tyr Leu Ser Asp Thr Ile Ser Pro Glu Gln
165 170 175
Ala Ile Asp Ser Leu Arg Asp Leu Arg Gly Ser
180 185

<210> 23
<211> 171
<212> DNA
<213> Homo sapiens

<400> 23
ggatcctgga tgccacgaga tggcaagagc cacaatcaat gaatgcatta tgggtcaaattc 60
ttttcatgta tatggatgtg actatitttaa caaataaaaag aagtgaaaag ttaaaaaaaa 120
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa agtcgacgcg gccgcgaatt c 171

<210> 24
<211> 53

<212> PRT
<213> Homo sapiens

<400> 24
Glu Phe Ala Ala Ala Ser Thr Phe Phe Phe Phe Phe Phe Phe Phe
1 5 10 15
Phe Phe Phe Leu Thr Phe His Phe Phe Tyr Leu Leu Lys Ser His Pro
20 25 30
Tyr Thr Lys Asp Leu Thr Ile Met His Ser Leu Ile Val Ala Leu Ala
35 40 45
Ile Ser Trp His Pro
50

<210> 25
<211> 678
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (582)...(602)
<223> n = A, C, G or T

<400> 25
ggatcctgca cttatccagg ttaagatcta aataggctgt aagtttcttg ttaaagtcac 60
gaacaatggt ggcaggatca ctatctgcaa actctgggac aggcacactg ataaattcaa 120
cttcttcttc ttcaaagatt ttaatatatt cttcaattgt ctggtagaga gcagctgggg 180
catctgcaga gggctcattt aagatgacat catctttgat gtactttatt ccacagtagt 240
acacgtcatc tggttgaagt gcaaaatatt tgtacaagta tgctcctcct agaataacac 300
ctgcaagcat aaatgctagt ccaaagcaca tgcaccaaca ccaggctctt ctttggccaa 360
ctggtaccac atcatctggg tccttgagcgt ccaccgcgac ggcgtcgggg gggatgatga 420
gdcgctcctc gccgctcttg ggctcgtcct tcttggcctc cttctgggcc agagcggagt 480
tgaacgtcac cttcaccatg gcgcggcctg gggcgccctc gaagggcggc gccggctcgg 540
ggcgcggtcg cggctcccgg ctgcgattgc agcctctacg gncgggctcc gggagccggc 600
tncgggcggc tgaagaaggt cggaagctt cgcggcggca gaagcggcta ctgcgggtcg 660
acgccggccg cgaaattc 678

<210> 26
<211> 219
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (26)...(33)
<223> Xaa = any amino acid

<400> 26
Glu Phe Arg Gly Arg Arg Arg Pro Ala Val Ala Ala Ser Ala Ala Ala

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | | 5 | | 10 | | 15 | | | | | | | | | |
| Lys | Leu | Pro | Asp | Leu | Leu | Gln | Pro | Pro | Xaa | Ala | Gly | Ser | Arg | Ser | Pro |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Xaa | Val | Glu | Ala | Ala | Ile | Ala | Ala | Gly | Ser | Arg | Ser | Arg | Ala | Pro | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Arg | Arg | Arg | Pro | Ser | Arg | Ala | Pro | Gln | Ala | Ala | Pro | Trp | Arg | Arg | Ser |
| | 50 | | | | 55 | | | | | | 60 | | | | |
| Thr | Pro | Leu | Trp | Pro | Arg | Arg | Arg | Pro | Arg | Arg | Thr | Ser | Pro | Arg | Ala |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ala | Arg | Arg | Arg | Ser | Ser | Ser | Pro | Pro | Thr | Pro | Ser | Arg | Trp | Thr | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Arg | Thr | Gln | Met | Met | Trp | Tyr | Gln | Leu | Ala | Lys | Glu | Glu | Pro | Gly | Val |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Gly | Ala | Cys | Ala | Leu | Asp | His | Leu | Cys | Leu | Gln | Val | Leu | Phe | Glu | Glu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| His | Thr | Cys | Thr | Asn | Ile | Leu | His | Phe | Asn | Gln | Met | Thr | Cys | Thr | Thr |
| | 130 | | | | 135 | | | | | | 140 | | | | |
| Val | Glu | Ser | Thr | Ser | Lys | Met | Met | Ser | Ser | Met | Ser | Pro | Leu | Gln | Met |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Pro | Gln | Leu | Leu | Ser | Thr | Arg | Gln | Leu | Lys | Lys | Ile | Leu | Lys | Ser | Leu |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Lys | Lys | Lys | Lys | Leu | Asn | Leu | Ser | Val | Cys | Leu | Ser | Gln | Ser | Leu | Gln |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ile | Val | Ile | Leu | Pro | Thr | Leu | Phe | Met | Thr | Leu | Thr | Arg | Asn | Leu | Gln |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Pro | Ile | Ile | Leu | Thr | Trp | Ile | Ser | Ala | Gly | Ser | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 27

<211> 916

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (613)...(915)

<223> n = A, C, G or T

<400> 27

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catgagatta gacattgaga tggtccttt atattgagag aacatggact ttggagttgg 120
gcagacttga atttgcattc tggctctagt gggtactacc tagtgtggct ttgagctatt 180
aaactttcca aagtttcgaa ggacttatct gtaacatagt aatggtaatc caccttatgg 240
ggtagtgtgc ttgaagaggc tatttgggag gctgaggcaa gaggatcact tgaggccagg 300
aggttgaaac cagcctgggc aacacagcga gaccctgtgt ctacaaaaaa ttaaaaaatt 360
aggcattgtg gcgtgcacct gaagtcccag ctactcaagg cagagatggg aggatcactt 420
gtgccaggga gctccaggct gcagtgagcc atgattttgc cactgcactc cagactgggt 480
gacagagcaa gaccccttct ctttgttggg ggcaaaaaaa aaaaaaagag ggtatatgaa 540
gtacctagta taatatctag cctgaattgc ctataatgac gcacttcctt tctttccctt 600

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```

gggtttcagc tgncaaacac tcttctacaa gtaagataag cccagctttg natgggtcaat 660
ggataaacat ttcctatttc tttgtaaatc ccatnttctg cagacatctc aatttcacatca 720
ttggccaaaa aagtcctttc attccttanc cctgganaaa taacctttnt taaatnttaa 780
accgntntgc ctgaactttg gctatcctct tntacatntc cttaaaccan ggacttggaa 840
cttcttggat cantcccaag attaattcct taantttttc anaccaaccg gtatgaagca 900
gggaatangg ccttnt 916

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<210> 28
<211> 236
<212> PRT
<213> Homo sapiens

```

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<220>
<221> UNSURE
<222> (1)...(93)
<223> Xaa = any amino acid

```

```

<400> 28
Xaa Gly Xaa Ile Pro Cys Phe Ile Pro Val Gly Xaa Lys Xaa Leu Arg
1      5      10      15
Asn Ser Trp Xaa Ser Lys Lys Phe Gln Val Xaa Gly Leu Arg Xaa Cys
20      25      30
Xaa Arg Gly Pro Lys Phe Arg Xaa Xaa Gly Leu Xaa Phe Xaa Lys Gly
35      40      45
Tyr Xaa Ser Arg Xaa Lys Glu Lys Asp Phe Phe Gly Gln Asn Asp Val
50      55      60
Cys Arg Xaa Trp Asp Leu Gln Arg Asn Arg Lys Cys Leu Ser Ile Asp
65      70      75      80
His Xaa Lys Leu Gly Leu Ser Tyr Leu Lys Ser Val Xaa Gln Leu Lys
85      90      95
Pro Lys Gly Lys Lys Gly Ser Ala Ser Leu Ala Ile Gln Ala Arg Tyr
100     105     110
Tyr Thr Arg Tyr Phe Ile Tyr Pro Leu Phe Phe Phe Phe Ala Pro Asn
115     120     125
Lys Glu Lys Gly Ser Cys Ser Val Thr Gln Ser Gly Val Gln Trp Gln
130     135     140
Asn His Gly Ser Leu Gln Pro Gly Ala Pro Gly His Lys Ser Ser His
145     150     155     160
Leu Cys Leu Glu Leu Gly Leu Gln Val His Ala Thr Met Pro Asn Phe
165     170     175
Leu Ile Phe Cys Arg His Arg Val Ser Leu Cys Cys Pro Gly Trp Phe
180     185     190
Gln Pro Pro Gly Leu Lys Ser Ser Cys Leu Ser Leu Pro Asn Ser Leu
195     200     205
Phe Lys Thr Thr Thr Pro Gly Leu Pro Leu Leu Cys Tyr Arg Val
210     215     220
Leu Arg Asn Phe Gly Lys Phe Asn Ser Ser Lys Pro
225     230     235

```


<210> 29
 <211> 930
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> unsure
 <222> (611)...(928)
 <223> n = A, C, G or T

<400> 29
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 gtacataaca aacatggcga aaaaggagat gtttgaaacc atctgcattt ttttctgtga 120
 tcggtcttta agctcactgt aaattggcag gactgacggg tggcaaacaa atgcaaatgc 180
 aatggtgggt aaagcataca cggctcttga attgaaggta acatattttg gcgtacacgt 240
 gtcagcattt gttgaattag cacttattgt tgaatttagc tctggaacaa tgcaggggaat 300
 ttgaaatttc ttgtaaataa ccacaattag gaaaaaaacc atacagctca aggaaaatcc 360
 actagtatag ccaagatacc ctaagttctt caagagacac agagggagaa ttatgccaaa 420
 ggtaactatc accaccagaa cgcggccatc cacgtaccag gctgaaaatg tctcttcctt 480
 tcccattaga aactttatgg cagagggttag ttcatTTTTT acgatgaaga ggtagctcag 540
 cattgctcca gtgttctgta gagagggtggc ttcaaagatt acgaacttcc tgtggtgcca 600
 aagacttggt nccccacttt tcatacacca tgcagnctgt tcttttgaac agatcaatag 660
 ganggttaat ggaatatata gacagcaatg tcactgaagt caaaagtacc cgaaaaagtn 720
 gggattccag tgtttgccag ggcaaaaggc caattcccaa aattccactt gnccataatg 780
 gccttgctta aggttaaaac cgacatgccc taanggaggt tgnacctggg aatatactca 840
 ttncactttt ttttttccaa aggctgtttg gganantttt tttanttttc cgaccnaaat 900
 aaacttgnnt ttaacngacc tttttttnct 930

<210> 30
 <211> 307
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)...(104)
 <223> Xaa = any amino acid

<400> 30
 Xaa Lys Lys Arg Ser Val Lys Xaa Lys Phe Ile Xaa Val Gly Lys Xaa
 1 5 10 15
 Lys Lys Xaa Ser Gln Thr Ala Phe Gly Lys Lys Lys Val Xaa Val Tyr
 20 25 30
 Ser Gln Val Gln Pro Pro Leu Gly His Val Gly Phe Asn Leu Lys Gln
 35 40 45
 Gly His Tyr Gly Gln Val Glu Phe Trp Glu Leu Ala Phe Cys Pro Gly
 50 55 60
 Lys His Trp Asn Pro Xaa Phe Phe Gly Tyr Phe Leu Gln His Cys Cys
 65 70 75 80
 Leu Tyr Ile Pro Leu Thr Xaa Leu Leu Ile Cys Ser Lys Glu Gln Xaa

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | | 85 | | | | | 90 | | | | | 95 | | | |
| Ala | Trp | Cys | Met | Lys | Ser | Gly | Xaa | Pro | Ser | Leu | Trp | His | His | Arg | Lys | | |
| | | | 100 | | | | | 105 | | | | | 110 | | | | |
| Phe | Val | Ile | Phe | Glu | Ala | Thr | Ser | Leu | Gln | Asn | Thr | Gly | Ala | Met | Leu | | |
| | | 115 | | | | | 120 | | | | | 125 | | | | | |
| Ser | Tyr | Leu | Phe | Ile | Val | Lys | Asn | Glu | Leu | Pro | Ser | Ala | Ile | Lys | Phe | | |
| | 130 | | | | | 135 | | | | | 140 | | | | | | |
| Leu | Met | Gly | Lys | Glu | Glu | Thr | Phe | Ser | Ala | Trp | Tyr | Val | Asp | Gly | Arg | | |
| 145 | | | | 150 | | | | | 155 | | | | | | 160 | | |
| Val | Leu | Val | Val | Ile | Val | Thr | Phe | Gly | Ile | Ile | Leu | Pro | Leu | Cys | Leu | | |
| | | | | 165 | | | | 170 | | | | | | 175 | | | |
| Leu | Lys | Asn | Leu | Gly | Tyr | Leu | Gly | Tyr | Thr | Ser | Gly | Phe | Ser | Leu | Ser | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | |
| Cys | Met | Val | Phe | Phe | Leu | Ile | Val | Val | Ile | Tyr | Lys | Lys | Phe | Gln | Ile | | |
| | | 195 | | | | | 200 | | | | 205 | | | | | | |
| Pro | Cys | Ile | Val | Pro | Glu | Leu | Asn | Ser | Thr | Ile | Ser | Ala | Asn | Ser | Thr | | |
| | 210 | | | | | 215 | | | | 220 | | | | | | | |
| Asn | Ala | Asp | Thr | Cys | Thr | Pro | Lys | Tyr | Val | Thr | Phe | Asn | Ser | Lys | Thr | | |
| 225 | | | | 230 | | | | | 235 | | | | | | 240 | | |
| Val | Tyr | Ala | Leu | Pro | Thr | Ile | Ala | Phe | Ala | Phe | Val | Cys | His | Pro | Ser | | |
| | | | | 245 | | | | 250 | | | | | | 255 | | | |
| Val | Leu | Pro | Ile | Tyr | Ser | Glu | Leu | Lys | Asp | Arg | Ser | Gln | Lys | Lys | Met | | |
| | | | 260 | | | | | 265 | | | | | 270 | | | | |
| Gln | Met | Val | Ser | Asn | Ile | Ser | Phe | Phe | Ala | Met | Phe | Val | Met | Tyr | Phe | | |
| | | 275 | | | | | 280 | | | | | 285 | | | | | |
| Leu | Thr | Ala | Ile | Phe | Gly | Tyr | Leu | Thr | Phe | Tyr | Asp | Asn | Val | Gln | Ser | | |
| | 290 | | | | | 295 | | | | | 300 | | | | | | |
| Asp | Gly | Ser | | | | | | | | | | | | | | | |
| 305 | | | | | | | | | | | | | | | | | |

<210> 31
 <211> 919
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (610)...(918)
 <223> n = A, C, G or T

<400> 31
 gggatccggg gattaaggat ggagggacta aattcaagat attaacaaag gaacaaagaa 60
 acagggcctg atgggaggca gaggatagaa cagactgtac agtgggaata aagatcatac 120
 ctatttaciaa ggaagtagaa aagacatggt aatggatatc aaattgagtg tgaaacctgg 180
 gaaaggacag aaaactcctc ccttttgctt gacctccttt ttactcccct accttggcct 240
 gtgctatcct gagacactcc tcaattgctc aattaattct ccaggaaagg caaacctata 300
 gtcaatagtt agcttggcaa gaatataggt taataattag agttggagga agctaacagt 360
 ggagatagga cttgagtagc tgccactggg agttttatct ataacctctc ctcgaacctc 420
 gcattaacct cagatttcat tgaattaaaa agaagggtggg agggcaagta aatcaatcaa 480

```

aacttccata aaacaagtac cccaactgaa ctaccatcaa ttaaagtgca aactgcaggg 540
gtatatgggt ggctggggct gaggccatct aaaggccaga ggggaaaaaa tgcatatgta 600
taaatacagan gatgggtacc agaactgncc cttccttcaa tcagatcaca gcagagccca 660
agatgcaggc aaccagtgga aaatcnttgg gaagactctg ggtccaacc ccacgattag 720
gggaaaccct tccttaaaaa ggttgcntga aggggaaact gggccctttg aaaaagttac 780
nggaaccena gtggnccttg accttcacct tcggccatta ncttacaagg gaccttcctg 840
cnggggcctg aaaattgcct ccccatTTta nctttaccta ggaaccctt ccnaggncaa 900
tttgggttcc ccatggtnt

```

<210> 32

<211> 290

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (1)...(100)

<223> Xaa = any amino acid

<400> 32

```

Xaa Pro Trp Gly Thr Gln Ile Xaa Leu Gly Arg Gly Ser Val Lys Xaa
 1          5          10          15
Lys Trp Gly Gly Asn Phe Gln Ala Pro Ala Gly Arg Ser Leu Val Xaa
 20          25          30
Trp Pro Lys Val Lys Val Lys Xaa His Xaa Gly Ser Xaa Asn Phe Phe
 35          40          45
Lys Gly Pro Ser Phe Pro Phe Xaa Gln Pro Phe Gly Arg Val Ser Pro
 50          55          60
Asn Arg Gly Val Gly Pro Gln Ser Leu Pro Xaa Asp Phe Pro Leu Val
 65          70          75          80
Ala Cys Ile Leu Gly Ser Ala Val Ile Leu Lys Glu Gly Xaa Val Leu
 85          90          95
Val Pro Ile Xaa Phe Ile His Met His Phe Phe Pro Ser Gly Leu Met
 100          105          110
Ala Ser Ala Pro Ala Thr His Ile Pro Leu Gln Phe Ala Leu Leu Met
 115          120          125
Val Val Gln Leu Gly Tyr Leu Phe Tyr Gly Ser Phe Asp Phe Thr Cys
 130          135          140
Pro Pro Thr Phe Phe Leu Ile Gln Asn Leu Arg Leu Met Arg Gly Ser
 145          150          155          160
Arg Arg Gly Tyr Arg Asn Tyr Gln Trp Gln Leu Leu Lys Ser Tyr Leu
 165          170          175
His Cys Leu Pro Pro Thr Leu Ile Ile Asn Leu Tyr Ser Cys Gln Ala
 180          185          190
Asn Tyr Leu Val Cys Leu Ser Trp Arg Ile Asn Ala Ile Glu Glu Cys
 195          200          205
Leu Arg Ile Ala Gln Ala Lys Val Gly Glu Lys Gly Gly Gln Ala Lys
 210          215          220
Gly Arg Ser Phe Leu Ser Phe Pro Arg Phe His Thr Gln Phe Asp Ile
 225          230          235          240

```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Tyr | His | Val | Phe | Ser | Thr | Ser | Leu | Ile | Gly | Met | Ile | Phe | Ile | Pro |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Thr | Val | Gln | Ser | Val | Leu | Ser | Ser | Ala | Ser | His | Gln | Ala | Leu | Phe | Leu |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Cys | Ser | Phe | Val | Asn | Ile | Leu | Asn | Leu | Val | Pro | Pro | Ser | Leu | Ile | Pro |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Gly | Ser | | | | | | | | | | | | | | |
| | 290 | | | | | | | | | | | | | | |

<210> 33
 <211> 916
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (596)...(915)
 <223> n = A, C, G or T

<400> 33

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggatccgcc | tggtagcggc | aaaagagttt | tttctgtctc | cgaggggtca | ttttgatacc | 60 |
| ctccccacgg | cacagcattt | cgtacttctg | tctctctggc | aggtaatcca | cagcaacccc | 120 |
| ttttttcttt | ggtgtagttt | tctgatcaga | ttggtcatct | gaagcagact | tattgacatc | 180 |
| tttttcttta | gccattatat | actcaaaata | ttttaagtta | ccattagctc | tctgatgttc | 240 |
| aggatctagt | tcaagaagct | tctttgtgag | caaaagtgcc | ttatccaggt | ctccctgctg | 300 |
| atataccgca | tagctcaaat | aatctagaac | agagacttta | tctatggtag | aaatctcgcc | 360 |
| ttcatccagt | tgccttaggg | cttgttccat | ccacagttcc | gtatggtaat | aatctgcttc | 420 |
| tgtataggcc | actttgccc | actcaaagca | gtcctcagcc | cgttagaaaa | gatttgtgtt | 480 |
| tcactcctgg | aagattaccc | tttgagatgg | tatctgtatc | caaattgtag | gtatcctgga | 540 |
| gacgtaacag | agctttggct | gccccaacct | gatcttcatc | attaggaaag | tactgnctct | 600 |
| gaatgggtan | ggtagagata | aagccatctg | acatatcctt | aaggaccaga | ttctccaact | 660 |
| cacttcactc | agtattcaga | cgttcattaa | atttgaatgc | atttactggg | tggcccaaca | 720 |
| aatccttctg | gaacntttgn | cgctggacta | agttaccgca | tctaacntct | ntgcccatth | 780 |
| tttaantggn | ctacctgggc | ctntntggcc | ttaannnanc | ttcnaaaag | cccnnaactt | 840 |
| tncaagnntg | ggcnaannng | ncntttgccn | ntgannnaaa | aacntggang | nccccaanct | 900 |
| gggaaccnaa | ttnnnt | | | | | 916 |

<210> 34
 <211> 299
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)...(103)
 <223> Xaa = any amino acid

<400> 34

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Asn | Xaa | Val | Pro | Xaa | Leu | Gly | Xaa | Ser | Xaa | Phe | Xaa | Xaa | Xaa | Xaa |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Gln | Xaa | Xaa | Xaa | Xaa | Pro | Xaa | Leu | Xaa | Lys | Xaa | Xaa | Ala | Phe | Xaa | Lys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Xaa | Xaa | Gly | Xaa | Xaa | Gly | Pro | Gly | Xaa | Pro | Xaa | Lys | Lys | Trp | Ala | Xaa |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Xaa | Leu | Asp | Arg | Val | Thr | Ser | Ser | Xaa | Lys | Xaa | Ser | Arg | Arg | Ile | Cys |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Trp | Ala | Thr | Gln | Met | His | Ser | Asn | Leu | Met | Asn | Val | Ile | Leu | Ser | Glu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Val | Ser | Trp | Arg | Ile | Trp | Ser | Leu | Arg | Ile | Cys | Gln | Met | Ala | Leu | Ser |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Leu | Pro | Tyr | Pro | Phe | Arg | Xaa | Ser | Thr | Phe | Leu | Met | Met | Lys | Ile | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Gly | Gln | Pro | Lys | Leu | Cys | Tyr | Val | Ser | Arg | Ile | Pro | Thr | Ile | Trp |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Ile | Gln | Ile | Pro | Ser | Gln | Arg | Val | Ile | Phe | Gln | Glu | Asn | Thr | Asn | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Phe | Arg | Ala | Glu | Asp | Cys | Phe | Glu | Leu | Gly | Lys | Val | Ala | Tyr | Thr | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ala | Asp | Tyr | Tyr | His | Thr | Glu | Leu | Trp | Met | Glu | Gln | Ala | Leu | Arg | Gln |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Leu | Asp | Glu | Gly | Glu | Ile | Ser | Thr | Ile | Asp | Lys | Val | Ser | Val | Leu | Asp |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Tyr | Leu | Ser | Tyr | Ala | Val | Tyr | Gln | Gln | Gly | Asp | Leu | Asp | Lys | Ala | Leu |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Leu | Leu | Thr | Lys | Lys | Leu | Leu | Glu | Leu | Asp | Pro | Glu | His | Gln | Arg | Ala |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Asn | Gly | Asn | Leu | Lys | Tyr | Phe | Glu | Tyr | Ile | Met | Ala | Lys | Glu | Lys | Asp |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Val | Asn | Lys | Ser | Ala | Ser | Asp | Asp | Gln | Ser | Asp | Gln | Lys | Thr | Thr | Pro |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Lys | Lys | Lys | Gly | Val | Ala | Val | Asp | Tyr | Leu | Pro | Glu | Arg | Gln | Lys | Tyr |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Glu | Met | Leu | Cys | Arg | Gly | Glu | Gly | Ile | Lys | Met | Thr | Pro | Arg | Arg | Gln |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Lys | Lys | Leu | Phe | Cys | Arg | Tyr | His | Gly | Gly | Ser | | | | | |
| | 290 | | | | | 295 | | | | | | | | | |

<210> 35

<211> 916

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (596)...(915)

<223> n = A, C, G or T

<400> 35

```

ggatccgccca tggtagcggc aaaagagttt tttctgtctc cgaggggtca ttttgatacc 60
ctccccacgg cacagcattt cgtacttctg tctctctggc aggtaatcca cagcaacccc 120
ttttttcttt ggtgtagttt tctgatcaga ttggtcatct gaagcagact tattgacatc 180
ttttttcttta gccattatat actcaaaata ttttaagtta ccattagctc tctgatgttc 240
aggatctagt tcaagaagct tctttgtgag caaaagtgcc ttatccaggt ctccctgctg 300
atataccgca tagctcaaat aatctagaac agagacttta tctatggtag aaatctcgcc 360
ttcatccagt tgccttaggg cttgttccat ccacagttcc gtatggtaat aatctgcttc 420
tgtataggcc actttgccc aactcaaagca gtcctcagcc cgttagaaaa gatttgtgtt 480
tcactcctgg aagattaccc tttgagatgg tatctgtatc caaattgtag gtatcctgga 540
gacgtaacag agctttggct gccccaacct gatcttcac attaggaaag tactgnctct 600
gaatgggtan ggtagagata aagccatctg acatatcctt aaggaccaga ttctccaact 660
cacttcactc agtattcaga cgttcattaa atttgaatgc atttactggg tggcccaaca 720
aatccttctg gaacntttgn cgctggacta agttaccgga tctaacntct ntgcccattt 780
tttaantggn ctacctgggc ctntntggcc ttaannnanc tttcnaaaag ccnnaactt 840
tncaagnntg ggcnaannng ncntttgccn ntgannnaaa aacntggang nccccaanct 900
gggaaccnaa ttnnnt
916

```

<210> 36
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 36
Asn Ser Arg Pro Arg Arg Pro Gly Trp Leu Arg Gly Ala Ala Pro Gly
1          5          10          15
Pro Arg Gly Ser Gln Ser Asn Glu Thr Thr Ala Cys Ser Arg Leu Val
20          25          30
Glu Ile Ser Arg Arg His Gln Trp Ala Arg Ser Glu Pro Ser Gly Pro
35          40          45
Pro Val Trp Asn Gln Thr Cys Ala Arg Gly Arg Ala Val Gly Gln Arg
50          55          60
Gly Arg Gly Asp Glu Gly Ala Met Ala Arg Lys Leu Ser Val Ile Leu
65          70          75          80
Ile Leu Thr Phe Ala Leu Ser Val Thr Asn Pro Leu His Glu Leu Lys
85          90          95
Ala Ala Ala Phe Pro Gln Thr Thr Gly Ser
100          105

```

<210> 37
 <211> 626
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (586)...(586)
 <223> n = A, C, G or T

<400> 37

```

ggatccacca accccggcct cccaaagtgc tgggattaca ggcattgagcc accacgcca 60
gccattcctt gtcatttcta tcatttgata catctatact tctgaataat cataactgat 120
actcaaagag atgccctgac accctccaag gttctacaag gtgaccaa at cagagaggc 180
acctcatgcc tagtattatt ttgggggttag catacatttt ataataatta ttttaaaact 240
ggcaatccat tttgggactc aatgacagct ctctctatta atcatattgt tttattaact 300
gaaatagtcc actcagtcag taggattaat gatcagagat tatgacacaa ctaaaaccaa 360
agctggggca atgggctctc agaatggaac caccattat gaactatcca tctgaccaac 420
tctttaactt tcttcctaaa tatgagatca ccaaggcggt tcaatgcagc ctgcacaatt 480
catggggcag ggtcctcaga ttaaagactt tacatttatg tagaattcaa gtatcatttt 540
tcactaagca aactctattt gctcactctc ttctacatgt aattgnccaa ctttggttga 600
ctgctgagtc ctcatgggaa gaattc 626

```

<210> 38

<211> 188

<212> PRT

<213> Homo sapiens

<400> 38

```

Ile Leu Pro Met Arg Thr Gln Gln Ser Thr Lys Val Gly Gln Leu His
1      5      10      15
Val Glu Glu Ser Glu Gln Ile Glu Phe Ala Lys Met Ile Leu Glu Phe
20      25      30
Tyr Ile Asn Val Lys Ser Leu Ile Gly Pro Cys Pro Met Asn Cys Ala
35      40      45
Gly Cys Ile Glu Thr Pro Trp Ser His Ile Glu Glu Ser Arg Val Gly
50      55      60
Gln Met Asp Ser Ser Trp Val Val Pro Phe Glu Pro Ile Ala Pro Ala
65      70      75      80
Leu Val Leu Val Val Ser Ser Leu Ile Ile Asn Pro Thr Asp Val Asp
85      90      95
Tyr Phe Ser Asn Asn Met Ile Asn Arg Glu Ser Cys His Val Pro Lys
100     105     110
Trp Ile Ala Ser Phe Lys Ile Ile Ile Lys Cys Met Leu Thr Pro
115     120     125
Lys Tyr Ala Gly Asp Leu Ser Asp Leu Val Thr Leu Asn Leu Gly Gly
130     135     140
Cys Gln Gly Ile Ser Leu Ser Ile Ser Tyr Asp Tyr Ser Glu Val Met
145     150     155     160
Tyr Gln Met Ile Glu Met Thr Arg Asn Gly Trp Ala Trp Trp Leu Met
165     170     175
Pro Val Ile Pro Ala Leu Trp Glu Ala Gly Val Gly
180     185

```

<210> 39

<211> 897

<212> DNA

<213> Homo sapiens

<220>

<221> unsure
 <222> (634)...(896)
 <223> n = A, C, G or T

<400> 39
 ggatcctgag ctaagcatgg tccctccgta gatatccaga gccagctgag aataggcaaa 60
 gccaaaaaca gtgatgggtca ggccgggccag caggggccagc ttgagcaggg actccaagac 120
 tgcagcagcc acagcaacgt cctcctgctt ctgaagtgtg gcatcctttc ccctctccag 180
 caccttagca aaaaatatat aaaaactttc ctctattggc tggaaaatta atctggccac 240
 aagggagcca agattattca ctatatcata cacaccctga tcaccaaagt tcaatacatt 300
 caaaaatgtc atcacatatc gctcgccttc tgtcaaaatc tgtttcaaga aagactgttt 360
 gaaaaaactc caagtcagtt tagcctcttt ccagtttata aacgctccat ttcttgtaat 420
 attgggtaac agatctgtta ttctggagac aggaagagtt tgaagcttgg ttgattctgg 480
 ggaacccagt aactttgtga aataaataac atagcagagc accagaactg tggatataga 540
 aagctggggc aaagagaaaa tgtacaatcc ccagtgaggc aaccacagca cgagaaaagc 600
 tgtcagacgc tcttaagaat taccgcaggc tctntgcaat caccttgagc ttncaaacat 660
 atgtgcttgt gcccaagaac caaaaggctn ttctanaagc ttcaccactg gcgaaagacc 720
 aaccgnacca ntccagttgc atantgaggg acaccattag gatcngcctt tnagcagttt 780
 aaccagatcn gccccaggaat anggcccaac ttcccagggg actgttacc c ancaggttaa 840
 gggctggtcc agctncctgg ggccccctgg anatgtttgn gaaggccttt ggccnnt 897

<210> 40
 <211> 296
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)...(86)
 <223> Xaa = any amino acid

<400> 40
 Xaa Gly Gln Arg Pro Ser Gln Thr Xaa Pro Gly Gly Pro Arg Xaa Leu
 1 5 10 15
 Asp Gln Pro Leu Thr Xaa Trp Val Thr Val Pro Trp Glu Val Gly Pro
 20 25 30
 Tyr Ser Trp Ala Asp Leu Val Xaa Leu Leu Lys Gly Xaa Ser Trp Cys
 35 40 45
 Pro Ser Xaa Cys Asn Trp Xaa Gly Xaa Val Gly Leu Ser Pro Val Val
 50 55 60
 Lys Leu Xaa Glu Xaa Pro Phe Gly Ser Trp Ala Gln Ala His Met Phe
 65 70 75 80
 Xaa Ser Ser Arg Leu Xaa Arg Ala Cys Gly Asn Ser Glu Arg Leu Thr
 85 90 95
 Ala Phe Leu Val Leu Trp Leu Pro His Trp Gly Leu Tyr Ile Phe Ser
 100 105 110
 Leu Ala Gln Leu Phe Tyr Thr Thr Val Leu Val Leu Cys Tyr Val Ile
 115 120 125
 Tyr Phe Thr Lys Leu Leu Gly Ser Pro Glu Ser Thr Lys Leu Gln Thr
 130 135 140

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Pro | Val | Ser | Arg | Ile | Thr | Asp | Leu | Leu | Pro | Asn | Ile | Thr | Arg | Asn |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gly | Ala | Phe | Ile | Asn | Trp | Lys | Glu | Ala | Lys | Leu | Thr | Trp | Ser | Phe | Phe |
| | | | | 165 | | | | | 170 | | | | | | 175 |
| Lys | Gln | Ser | Phe | Leu | Lys | Gln | Ile | Leu | Thr | Glu | Gly | Glu | Arg | Tyr | Val |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Met | Thr | Phe | Leu | Asn | Val | Leu | Asn | Phe | Gly | Asp | Gln | Gly | Val | Tyr | Asp |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Ile | Val | Asn | Asn | Leu | Gly | Ser | Leu | Val | Ala | Arg | Leu | Ile | Phe | Gln | Pro |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ile | Glu | Glu | Ser | Phe | Tyr | Ile | Phe | Phe | Ala | Lys | Val | Leu | Glu | Arg | Gly |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Lys | Asp | Ala | Thr | Leu | Gln | Lys | Gln | Glu | Asp | Val | Ala | Val | Ala | Ala | Ala |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Val | Leu | Glu | Ser | Leu | Leu | Lys | Leu | Ala | Leu | Leu | Ala | Gly | Leu | Thr | Ile |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Thr | Val | Phe | Gly | Phe | Ala | Tyr | Ser | Gln | Leu | Ala | Leu | Asp | Ile | Tyr | Gly |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Gly | Thr | Met | Leu | Ser | Ser | Gly | Ser | | | | | | | | |
| | 290 | | | | | 295 | | | | | | | | | |

<210> 41
 <211> 607
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (200)...(211)
 <223> n = A, C, G or T

<400> 41
 ggatccgtgg ccagaaaaaa aaaaatcggt acctacaaaa tctcttgggc aacacttaag 60
 ccatggaaga gccacatga atccaggtct actttccttt acaggtagat tccagaacaa 120
 caacaaaaaa tgtaagacta caagaaatga tttaatatga taaaactccc atttcaaaac 180
 ccagttctaa aggatttacn tgactaatgc ntgattatnt agtcatggaa aatgtctctc 240
 ataaaagtgc tcctaacaaa acatgatcta caataattta taaaatgtga agggttggga 300
 tgtgcagact gattggtgca cgtcagggtg tttctcttaa ataaggtata aaaaactatg 360
 atatcatagt ctttcgactt tattttctga gataaaaaag tataggcata ggtgttttta 420
 atagtcttct tgatgatatc ctttagaata atctatcaaa tggcttcttt catgtttcct 480
 gattatcagc attcatcagt gttactgtca gccttgatta agtgggtgaa aatttcagag 540
 aagaataagc aacttctgtg aacctttccc caatccctga gaatcatgtc gacgcggccg 600
 cgaattc 607

<210> 42
 <211> 189
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (121)...(125)
 <223> Xaa = any amino acid

<400> 42

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | His | Asp | Ser | Gln | Gly | Leu | Gly | Lys | Gly | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Gln | Lys | Leu | Leu | Ile | Leu | Leu | Asn | Phe | Gln | Pro | Leu | Asn | Gln | Gly | Gln |
| | | 20 | | | | | 25 | | | | | | 30 | | |
| His | Met | Leu | Ile | Ile | Arg | Lys | His | Glu | Arg | Ser | His | Leu | Ile | Asp | Tyr |
| | 35 | | | | | 40 | | | | | | 45 | | | |
| Ser | Lys | Gly | Tyr | His | Gln | Glu | Asp | Tyr | Lys | His | Leu | Cys | Leu | Tyr | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Phe | Ile | Ser | Glu | Asn | Lys | Val | Glu | Arg | Leu | Tyr | His | Ser | Phe | Leu | Tyr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Ile | Glu | Lys | Gln | Pro | Asp | Val | His | Gln | Ser | Val | Cys | Thr | Ser | Gln |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Pro | Phe | Thr | Phe | Tyr | Lys | Leu | Leu | Ile | Met | Phe | Cys | Glu | His | Phe | Tyr |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Glu | Arg | His | Phe | Pro | Leu | Asn | Asn | Xaa | Ala | Leu | Val | Xaa | Ile | Leu | Asn |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Trp | Val | Leu | Lys | Trp | Glu | Phe | Tyr | His | Ile | Lys | Ser | Phe | Leu | Val | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | His | Phe | Leu | Leu | Leu | Phe | Trp | Asn | Leu | Pro | Val | Lys | Glu | Ser | Arg |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Pro | Gly | Phe | Met | Trp | Ala | Leu | Pro | Trp | Leu | Lys | Cys | Cys | Pro | Arg | Asp |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Phe | Val | Gly | Asn | Asp | Phe | Phe | Phe | Ser | Gly | His | Gly | Ser | | | |
| | | 180 | | | | | | 185 | | | | | | | |

<210> 43
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 43

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|-----|
| ggatccttta | atgtcctcat | ttgttgctctg | ggtggagctg | atcaagtagg | tgtggaatcc | 60 |
| tgagaggcca | acgatggacc | agacagagaa | gaagcacacc | acagcctcca | ggacgcttgc | 120 |
| aggactgtcc | ttaagggcat | ttaggaatcc | tgtttgctgt | gaacgaagaa | tgacgtgggt | 180 |
| gataacgaat | gcaaataata | agactgtcag | aaaagacaga | gataaaataa | acataataaaa | 240 |
| aaatctgtag | tttcttttcc | ccacacagtt | gcctacccag | ggacagtggt | gatcaaaccg | 300 |
| ttctacgcag | ttatcacaaa | ggctgcaatg | ggaggcgcgga | gggggccgga | aaatcttgca | 360 |
| ggtgaaacag | tattttaagtt | tcacgggtctg | gccattgatg | atgacttctt | tggttctggg | 420 |
| aggcggggcgg | tacccccctg | aactgggtcg | acgcggccgc | gaattc | | 466 |

<210> 44
 <211> 153
 <212> PRT

<213> Homo sapiens

<400> 44

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Pro | Ser | Ser | Gly | Gly | Tyr | Arg | Pro | Pro | Pro |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Arg | Thr | Lys | Glu | Val | Ile | Ile | Asn | Gly | Gln | Thr | Val | Lys | Leu | Lys | Tyr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Cys | Phe | Thr | Cys | Lys | Ile | Phe | Arg | Pro | Pro | Arg | Ala | Ser | His | Cys | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Leu | Cys | Asp | Asn | Cys | Val | Glu | Arg | Phe | Asp | His | His | Cys | Pro | Trp | Val |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Asn | Cys | Val | Gly | Lys | Arg | Asn | Tyr | Arg | Phe | Phe | Tyr | Met | Phe | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Ser | Leu | Ser | Phe | Leu | Thr | Val | Phe | Ile | Phe | Ala | Phe | Val | Ile | Thr |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| His | Val | Ile | Leu | Arg | Ser | Gln | Gln | Thr | Gly | Phe | Leu | Asn | Ala | Leu | Lys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Asp | Ser | Pro | Ala | Ser | Val | Leu | Glu | Ala | Val | Val | Cys | Phe | Phe | Ser | Val |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Trp | Ser | Ile | Val | Gly | Leu | Ser | Gly | Phe | His | Thr | Tyr | Leu | Ile | Ser | Ser |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Asn | Gln | Thr | Thr | Asn | Glu | Asp | Ile | Lys | | | | | | | |
| 145 | | | | | | 150 | | | | | | | | | |

<210> 45

<211> 395

<212> DNA

<213> Homo sapiens

<400> 45

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| ggatcctgtg | acaatctgat | ggccatacca | ggagcaagct | accaaggcgg | caagacctgc | 60 |
| cacgatgaaa | attatgcctc | cacccatggc | tatacgggcc | ttcttcaactt | tgctgtctcc | 120 |
| cccacagcgc | agtgcacttc | atgcccacgc | tggccacaaa | catggccagg | aagcccagca | 180 |
| ccaggagac | caccattagg | gctcgagtgg | cctgcaaggc | cgcgacagg | gcgagcaccg | 240 |
| agtcgtacat | tttgcagctc | atcatccccg | tgctctgcgt | gacgcagtcc | atccacagcc | 300 |
| ccttgtagat | ggcctggggc | gtgatgatgt | tgtcaccgcg | ataggagctc | atctgccact | 360 |
| gcgggatggc | ggtgcgtcga | cgcgcccgcg | aattc | | | 395 |

<210> 46

<211> 126

<212> PRT

<213> Homo sapiens

<400> 46

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Arg | Gly | Arg | Val | Asp | Ala | Pro | Pro | Ser | Arg | Ser | Gly | Arg | Ala | Pro |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Met | Arg | Val | Thr | Ser | Ser | Arg | Pro | Arg | Pro | Cys | Thr | Arg | Gly | Cys | |
| | | | 20 | | | | 25 | | | | | 30 | | | |
| Gly | Trp | Thr | Ala | Ser | Arg | Arg | Ala | Arg | Gly | Ala | Ala | Lys | Cys | Thr | Thr |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 35 | | | | 40 | | | | 45 | | | | | |
| Arg | Cys | Ser | Pro | Cys | Pro | Arg | Pro | Cys | Arg | Pro | Leu | Glu | Pro | Trp | Trp |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Pro | Trp | Cys | Trp | Ala | Ser | Trp | Pro | Cys | Leu | Trp | Pro | Arg | Trp | Ala |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Ala | Leu | Arg | Cys | Gly | Gly | Asp | Asp | Lys | Val | Lys | Lys | Ala | Arg | Ile |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | Met | Gly | Gly | Gly | Ile | Ile | Phe | Ile | Val | Ala | Gly | Leu | Ala | Ala | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Ala | Cys | Ser | Trp | Tyr | Gly | His | Gln | Ile | Val | Thr | Gly | Ser | | |
| | | 115 | | | | | 120 | | | | | 125 | | | |

<210> 47
 <211> 597
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (7)...(594)
 <223> n = A, C, G or T

<400> 47
 ggatccnanc tncnnacacn nacagagatc gacgnnnnct accaggtgag ccattgcggt 60
 aatatggact ttattnaagt aagttactta tattactgcc ttnccataca ctatntaatn 120
 ncatttgaat tactgagaga ctaatatgcc atgtctaaaa ctgtctcttt cataagtaat 180
 tttgngcctn cngctacncg aagcnaagnc aactcttcct tttttatata ctatganatg 240
 gcnccgangg cgaggagaan gctgaangnc tncgaactgg cagcgnggan accgganngn 300
 acnangaagc gggnnncccn ttcgngcca nnntcttttg nnttatcacg gnnagccanc 360
 gctnnggnct gatagcgnct cgncncaccc agccggccan agtcgatgaa tccnaaaaag 420
 cggccatttt ccaccatgan attcggcaag caggcatcgc catgggtcac gacganatcc 480
 tcgccgncgg gcatgcncgc cttgagcctg gcgaacagtt cggntggcgc gagcccctga 540
 tgctnttcgn ccaaatacatc ctgatcgaca agaccggctt ccatccgagn acngngct 597

<210> 48
 <211> 192
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (2)...(192)
 <223> Xaa = any amino acid

<400> 48
 Ser Xaa Xaa Ser Asp Gly Ser Arg Ser Cys Arg Ser Gly Phe Gly Arg
 1 5 10 15
 Xaa Ala Ser Gly Ala Arg Ala Xaa Arg Thr Val Arg Gln Ala Gln Gly
 20 25 30

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | His | Ala | Arg | Arg | Arg | Gly | Xaa | Arg | Arg | Asp | Pro | Trp | Arg | Cys | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Leu | Ala | Glu | Xaa | His | Gly | Gly | Lys | Trp | Pro | Leu | Phe | Xaa | Ile | His | Arg |
| | 50 | | | | 55 | | | | | | 60 | | | | |
| Leu | Trp | Pro | Ala | Gly | Xaa | Xaa | Gly | Xaa | Leu | Ser | Xaa | Xaa | Ser | Xaa | Gly |
| 65 | | | | 70 | | | | | | 75 | | | | | 80 |
| Xaa | Pro | Xaa | Gln | Arg | Xaa | Trp | Xaa | Arg | Xaa | Gly | Xaa | Pro | Leu | Xaa | Xaa |
| | | | 85 | | | | | 90 | | | | | | 95 | |
| Xaa | Xaa | Arg | Xaa | Xaa | Arg | Cys | Gln | Phe | Xaa | Xaa | Xaa | Gln | Xaa | Ser | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Arg | Xaa | Arg | Xaa | His | Xaa | Ile | Val | Tyr | Lys | Lys | Gly | Arg | Val | Xaa | Xaa |
| | | | 115 | | | | 120 | | | | | 125 | | | |
| Ala | Ser | Xaa | Ser | Xaa | Arg | Xaa | Lys | Ile | Thr | Tyr | Glu | Arg | Asp | Ser | Phe |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | His | Gly | Ile | Leu | Val | Ser | Gln | Phe | Lys | Xaa | Xaa | Xaa | Ile | Val | Tyr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gly | Lys | Ala | Val | Ile | Val | Thr | Tyr | Xaa | Asn | Lys | Val | His | Ile | Thr | Ala |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Met | Ala | His | Leu | Val | Xaa | Xaa | Val | Asp | Leu | Cys | Xaa | Cys | Xaa | Xaa | Xaa |
| | | | 180 | | | | | 185 | | | | | 190 | | |

<210> 49

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (191)...(538)

<223> n = A, C, G or T

<400> 49

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggatccccac | aaacacacag | gactccctcc | ctcccacaga | gaacacaaag | ttgttaactg | 60 |
| aagaacaaga | taaataatat | gctagtccat | tttactgatt | ttaaagatac | tgcaattttt | 120 |
| atacatttcg | atgatttttc | aacatttttc | agctgttttg | ctttgcagca | cagcaattca | 180 |
| tacactatac | ntgtacaaaa | ttaccagcaa | gactggaatg | atgtattaat | agaaggcacc | 240 |
| atcatgctta | ttacattacc | agagaacaaa | aatacagtaa | agacaatttt | cactgtacac | 300 |
| agcttaaaga | aaggaaaaaa | ggggaggagg | agtgtgttga | gcagccagcc | atccctgtac | 360 |
| tgaagagggg | caggtagaaa | aatcttagat | atggagctac | taaatctggg | ctaatagtca | 420 |
| agaccatcgc | atttgaagtt | ctaattttta | ttatttagtt | cataactaaa | atgatttcct | 480 |
| tctggaatat | acttgtagtc | ttgttaaggt | ttatgtgtac | acacgctgtc | gacgcggncg | 540 |
| cgaattc | | | | | | 547 |

<210> 50

<211> 167

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE
 <222> (107)...(107)
 <223> Xaa = any amino acid

<400> 50

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Gln | Arg | Val | Tyr | Thr | Thr | Leu | Thr | Arg | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Gln | Val | Tyr | Ser | Arg | Arg | Lys | Ser | Phe | Leu | Thr | Lys | Lys | Leu | Glu | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gln | Met | Arg | Trp | Ser | Leu | Leu | Asp | Gln | Ile | Leu | His | Ile | Asp | Phe | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Thr | Cys | Pro | Ser | Ser | Val | Gln | Gly | Trp | Leu | Ala | Ala | Gln | His | Thr | Pro |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Pro | Pro | Leu | Phe | Ser | Phe | Leu | Ala | Val | Tyr | Ser | Glu | Asn | Cys | Leu | Tyr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Cys | Ile | Phe | Val | Leu | Trp | Cys | Asn | Lys | His | Asp | Gly | Ala | Phe | Tyr | Tyr |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ile | Ile | Pro | Val | Leu | Leu | Val | Ile | Leu | Tyr | Xaa | Tyr | Ser | Val | Ile | Ala |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Leu | Gln | Ser | Gln | Thr | Ala | Ala | Lys | Cys | Lys | Ile | Ile | Glu | Met | Tyr |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Lys | Asn | Cys | Ser | Ile | Phe | Lys | Ile | Ser | Lys | Met | Asp | His | Ile | Ile | Tyr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Val | Leu | Gln | Leu | Thr | Thr | Leu | Cys | Ser | Leu | Trp | Glu | Gly | Gly | Ser |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Pro | Val | Cys | Leu | Trp | Gly | Ser | | | | | | | | | |
| | | | | | 165 | | | | | | | | | | |

<210> 51
 <211> 742
 <212> DNA
 <213> Homo sapiens

<220>

<221> unsure

<222> (512)...(741)

<223> n = A, C, G or T

<400> 51

| | | | | | | |
|------------|------------|-------------|-------------|------------|------------|-----|
| ggatcctgag | tcaagccaaa | aaaaaaaaaa | aaacccaaaac | aaaacaaaaa | aaacaaataa | 60 |
| agccatgcc | atctcatctt | gttttctg | caagttaggt | tttgtcaaga | aagggtgtaa | 120 |
| cgcaacttaa | gtcatagtcc | gcctagaagc | atgtgcggtg | gacgatggag | gggccggact | 180 |
| cgtcatactc | ctgcttgctg | atccacatct | gctggaaggt | ggacagcgag | gccaggatgg | 240 |
| agccgccgat | ccacacggag | tacttgcgct | caggaggagc | aatgatcttg | atcttcattg | 300 |
| tgctgggtgc | cagggcagtg | atctccttct | gcatacctgc | ggcaatgcc | gggtacatgg | 360 |
| tggtgccgcc | agacagcact | gtgttggcgt | acaggtcttt | gcggatgtcc | acgtcacact | 420 |
| tcatgatgga | gttgaaggta | gtttcgtgga | tgccacagga | ctccatgccc | aggaaggaag | 480 |
| gctggaagag | tgccatcagg | cagcgggaacc | gntcattgcc | aatggtgatg | acctggccgt | 540 |
| caggcancct | cgtanctctt | ctncaggagg | gagctggaan | cagccgtggc | catttcttgc | 600 |

togaagtcca gcgncgacgt accnntacn tntccttant gcctaccccn cgatttcccc 660
gctcgnrcgn nntngtcenn ancnntcccc cnttctnttg nncgnntnct cnnnngcgc 720
nncngcngn ntcnntntn nt 742

<210> 52
<211> 243
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (1)...(76)
<223> Xaa = any amino acid

<400> 52
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Xaa Glu Xaa Xaa Xaa Xaa Glu
1 5 10 15
Xaa Gly Xaa Xaa Gly Xaa Xaa Arg Xaa Ser Gly Glu Ile Xaa Gly
20 25 30
Ala Xaa Arg Xaa Xaa Xaa Tyr Val Xaa Ala Gly Leu Arg Ala Arg
35 40 45
Asn Gly His Gly Xaa Phe Gln Leu Leu Pro Xaa Glu Glu Xaa Arg Gly
50 55 60
Cys Leu Thr Ala Arg Ser Ser Pro Leu Ala Met Xaa Gly Ser Ala Ala
65 70 75 80
Leu Arg His Ser Ser Ser Leu Pro Ser Trp Ala Trp Ser Pro Val Ala
85 90 95
Ser Thr Lys Leu Pro Ser Thr Pro Ser Ser Val Thr Trp Thr Ser Ala
100 105 110
Lys Thr Cys Thr Pro Thr Gln Cys Cys Leu Ala Ala Pro Pro Cys Thr
115 120 125
Leu Ala Leu Pro Thr Gly Cys Arg Arg Arg Ser Leu Pro Trp His Pro
130 135 140
Ala Gln Arg Ser Arg Ser Leu Leu Leu Leu Ser Ala Ser Thr Pro Cys
145 150 155 160
Gly Ser Ala Ala Pro Ser Trp Pro Arg Cys Pro Pro Ser Ser Arg Cys
165 170 175
Gly Ser Ala Ser Arg Ser Met Thr Ser Pro Ala Pro Pro Ser Ser Thr
180 185 190
Ala Asn Ala Ser Arg Arg Thr Met Thr Val Ala Leu His Pro Phe Leu
195 200 205
Thr Lys Pro Asn Leu Arg Arg Lys Gln Asp Glu Ile Gly Met Ala Leu
210 215 220
Phe Val Phe Phe Val Leu Phe Trp Phe Phe Phe Phe Trp Leu Asp
225 230 235 240
Ser Gly Ser

<210> 53

<211> 598
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (214)...(597)
<223> n = A, C, G or T

<400> 53
ggatcctttc actgagtatt tgtcagggtc acactgggtg caagaagttt ctccttttatt 60
tgaataagag ttggctgggc aaagtttgca gaaagaggag ccctgcttgt ctgcatacgt 120
gccaggtttg caggggaagc attctgaagt gtaggccacc cctgttatgg caatgtttct 180
caccagcaca ggcttgggta ctttgggtcca tacntgagaa ggctgtgggt ctccaataga 240
ggacattatt gcctcgattt agctccacac tgtggaattc ccatcctttc tctgtggtct 300
tcatccacct ggagtcattt gcattgggct ggcactggtc attctgaacg aaaaactcaa 360
agatgatgct ggagtctgga tagtagtatt cgaagttaac ggtgccagat tgcttcaggt 420
tgacggcgta catcagtgtg gctgtgcatt cgtccgtgtt ggaggcgatg tagtcgcccc 480
ggggaaccca cttggacgaa gtacagttcc cggtggaactc agcagcactg tcatccagct 540
ccatgntggc tgagaggctg gcanagccat gggncanntc atcccactca tcanacnc 598

<210> 54
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (1)...(124)
<223> Xaa = any amino acid

<400> 54
Xaa Xaa Met Ser Gly Met Xaa Xaa Pro Met Ala Xaa Pro Ala Ser Gln
1 5 10 15
Pro Xaa Trp Ser Trp Met Thr Val Leu Leu Ser Pro Pro Gly Thr Val
20 25 30
Leu Arg Pro Ser Gly Phe Pro Gly Ala Thr Thr Ser Pro Pro Thr Arg
35 40 45
Thr Asn Ala Gln Pro His Cys Thr Pro Ser Thr Ser Asn Leu Ala Pro
50 55 60
Leu Thr Ser Asn Thr Thr Ile Gln Thr Pro Ala Ser Ser Leu Ser Phe
65 70 75 80
Ser Phe Arg Met Thr Ser Ala Ser Pro Met Gln Met Thr Pro Gly Gly
85 90 95
Arg Pro Gln Arg Lys Asp Gly Asn Ser Thr Val Trp Ser Ile Glu Ala
100 105 110
Ile Met Ser Ser Ile Gly Glu Pro Gln Pro Ser Xaa Val Trp Thr Lys
115 120 125
Val Pro Lys Pro Val Leu Val Arg Asn Ile Ala Ile Thr Gly Val Ala
130 135 140

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Thr | Ser | Glu | Cys | Phe | Pro | Cys | Lys | Pro | Gly | Thr | Tyr | Ala | Asp | Lys |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gln | Gly | Ser | Ser | Phe | Cys | Lys | Leu | Cys | Pro | Ala | Asn | Ser | Tyr | Ser | Asn |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Lys | Gly | Glu | Thr | Ser | Cys | His | Gln | Cys | Asp | Pro | Asp | Lys | Tyr | Ser | Val |
| | | | 180 | | | | | 185 | | | | | 190 | | |

Lys

<210> 55
 <211> 657
 <212> DNA
 <213> Homo sapiens

<400> 55

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| ggatcccatg | aggtagtcgg | tcaggtcccg | gccagccagg | tccagacgca | ggatggcgtg | 60 |
| ggggagggcg | tagccctcgt | agatgggcac | cgtgtgggtg | accccgctctc | cagagtccat | 120 |
| gacaatgcc | gtggtgcgcc | cagaggcgta | gagggacagc | acggcctgga | tggccacgta | 180 |
| catggccggg | gtggtgaagg | tctcaaacat | aatctgagtc | atcttctctc | tgttggcctt | 240 |
| ggggttcagg | ggggcctcgg | tcagcagcac | tgggtgctcc | tccggggcca | cgcgcagctc | 300 |
| gttgtagaag | gtgtggtgcc | agatcttctc | catgtcgtcc | cagttggtga | cgatgccatg | 360 |
| ctcaatgggg | tacttcaggg | tcaggatgcc | acgcttgctc | tgggcctcgt | cgcccacgta | 420 |
| ggagtccttc | tggcccatgc | ccaccatgac | gccctggtgt | ctggggcgcc | cgacgatgga | 480 |
| aggaaacacg | gctcggggag | cgctgtcccc | agcaaaacca | gctttgcaca | tgccggagcc | 540 |
| attgtcaatg | accagcgcgg | cgatctcttc | ttccattgcg | accggcagag | aaacgcgcgg | 600 |
| cggagcggcg | gaagaacaga | gtgcgagagt | tggcagcgtc | gacgcggccg | cgaattc | 657 |

<210> 56
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 56

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Phe | Ala | Ala | Ala | Ser | Thr | Leu | Pro | Thr | Leu | Ala | Leu | Cys | Ser | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ala | Ala | Pro | Pro | Arg | Val | Ser | Leu | Pro | Val | Ala | Met | Glu | Glu | Glu | Ile |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ala | Ala | Leu | Val | Ile | Asp | Asn | Gly | Ser | Gly | Met | Cys | Lys | Ala | Gly | Phe |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ala | Gly | Asp | Asp | Ala | Pro | Arg | Ala | Val | Phe | Pro | Ser | Ile | Val | Gly | Arg |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Pro | Arg | His | Gln | Gly | Val | Met | Val | Gly | Met | Gly | Gln | Lys | Asp | Ser | Tyr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Val | Gly | Asp | Glu | Ala | Gln | Ser | Lys | Arg | Gly | Ile | Leu | Thr | Leu | Lys | Tyr |
| | | | 85 | | | | | 90 | | | | | | 95 | |
| Pro | Ile | Glu | His | Gly | Ile | Val | Thr | Asn | Trp | Asp | Asp | Met | Glu | Lys | Ile |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Trp | His | His | Thr | Phe | Tyr | Asn | Glu | Leu | Arg | Val | Ala | Pro | Glu | Glu | His |
| | | 115 | | | | | 120 | | | | | 125 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Val | Leu | Leu | Thr | Glu | Ala | Pro | Leu | Asn | Pro | Lys | Ala | Asn | Arg | Glu |
| 130 | | | | | | 135 | | | | | 140 | | | | |
| Lys | Met | Thr | Gln | Ile | Met | Phe | Glu | Thr | Phe | Asn | Thr | Pro | Ala | Met | Tyr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Val | Ala | Ile | Gln | Ala | Val | Leu | Ser | Leu | Tyr | Ala | Ser | Gly | Arg | Thr | Thr |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Gly | Ile | Val | Met | Asp | Ser | Gly | Asp | Gly | Val | Thr | His | Thr | Val | Pro | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Tyr | Glu | Gly | Tyr | Ala | Leu | Pro | His | Ala | Ile | Leu | Arg | Leu | Asp | Leu | Ala |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Gly | Arg | Asp | Leu | Thr | Asp | Tyr | Leu | Met | Gly | Ser | | | | | |
| 210 | | | | | | 215 | | | | | | | | | |

<210> 57

<211> 237

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (211)...(232)

<223> n = A, C, G or T

<400> 57

```

ggatcccacc ttcaacacct tacaagtaaa gacaatgaag aacagttgaa acatgcaaaa 60
tatggagctt ttcatgtaat tactctttta ctgtttacca ttcactataa ttcacaatta 120
aaattgtgtg actaaacaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg ngganaggnc gacncggccg cnaattc 237

```

<210> 58

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (2)...(8)

<223> Xaa = any amino acid

<400> 58

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Xaa | Ala | Ala | Xaa | Ser | Xaa | Xaa | Pro | Pro | Phe | Phe | Phe | Phe | Phe | Phe |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Cys | Leu | Val | Thr | Gln | Phe | Leu | Ile | Ile | Val | Asn | Gly | Lys | Gln | Lys |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ser | Asn | Tyr | Met | Lys | Ser | Ser | Ile | Phe | Cys | Met | Phe | Gln | Leu | Phe | Phe |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Ile | Val | Phe | Thr | Cys | Lys | Val | Leu | Lys | Val | Gly | Ser | | | | |

65

70

75

<210> 59

<211> 199

<212> DNA

<213> Homo sapiens

<400> 59

```

ggatccctgg ctgccttctt catccgagga cgccgaggcc aagctcagca gcaccgcaca 60
cagcagcagc gtcagcccta tccggaccgc catcctcctc tcggggccgg tgccaacccc 120
tagagctgtc gccttcgcct ctgccaccac ggactcagcc accaccgccg cctcgccgcg 180
tcgacgcggc cgccaattc                                     199

```

<210> 60

<211> 66

<212> PRT

<213> Homo sapiens

<400> 60

```

Asn Ser Arg Pro Arg Arg Arg Gly Glu Ala Ala Val Val Ala Glu Ser
 1           5           10           15
Val Val Ala Glu Ala Lys Ala Thr Ala Leu Gly Val Gly Thr Gly Pro
          20           25           30
Glu Arg Arg Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala
          35           40           45
Val Leu Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln
          50           55           60
Gly Ser
65

```

<210> 61

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (456)...(489)

<223> n = A, C, G or T

<400> 61

```

ggatccggca accatgacca gcgagaccac caccagggca ccaaagagga tcttggtgag 60
gcagttcact tccaagtcga acaggccgat cttacttcgg ggatttgagg tattcatgac 120
actccggagt tctctgccag tgtaaagaac aacacccaca acagtacctg atgcgaccac 180
agtgccagcc cacagcgtgt tctctatgct caggctctcg ctgatcgggg ggtcgctgtc 240
ttctcgggta aaagttccca cgaagttgtg aatgtcaata tttggctctt ctgcgtacac 300
atacgatcga atctgaagaa ggtcggcggc cgtggggagc ctctgcgtgc aggccacggg 360
aagccgcagc ttccagtcgg tctccccatc cagctgatcc gtccgcaaga agcatgaccc 420

```

gttttttttct gatgtcctca ggaagatcat gtcggnnngg acccgctggt cgangcggcc 480
nccaattcn 489

<210> 62
<211> 163
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (1)...(12)
<223> Xaa = any amino acid

<400> 62
Xaa Ile Gly Gly Arg Xaa Asp Gln Arg Val Pro Xaa Asp Met Ile Phe
1 5 10 15
Leu Arg Thr Ser Glu Lys Asn Gly Ser Cys Phe Leu Arg Thr Asp Gln
20 25 30
Leu Asp Gly Glu Thr Asp Trp Lys Leu Arg Leu Pro Val Ala Cys Thr
35 40 45
Gln Arg Leu Pro Thr Ala Ala Asp Leu Leu Gln Ile Arg Ser Tyr Val
50 55 60
Tyr Ala Glu Glu Pro Asn Ile Asp Ile His Asn Phe Val Gly Thr Phe
65 70 75 80
Thr Arg Glu Asp Ser Asp Pro Pro Ile Ser Glu Ser Leu Ser Ile Glu
85 90 95
Asn Thr Leu Trp Ala Gly Thr Val Val Ala Ser Gly Thr Val Val Gly
100 105 110
Val Val Leu Tyr Thr Gly Arg Glu Leu Arg Ser Val Met Asn Thr Ser
115 120 125
Asn Pro Arg Ser Lys Ile Gly Leu Phe Asp Leu Glu Val Asn Cys Leu
130 135 140
Thr Lys Ile Leu Phe Gly Ala Leu Val Val Val Ser Leu Val Met Val
145 150 155 160
Ala Gly Ser

<210> 63
<211> 392
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (297)...(297)
<223> n = A, C, G or T

<400> 63
ggatccgagt gctgatttgt acattgattc aggggagtaa ttggggagaa ggaaaaaggt 60

```

ggggtggaat gctggctcgg ccctgccagt cacatgggtg gcagcagggc agctcagagg 120
ttgcctgaag agttcgtttt tcttgctcca gtccatctgc aggggcccgt ttgctgctgc 180
gtttctgggtg ggccctctct ttggccatgg ccaggagat gttgaagtct aggatggggg 240
cggaggagga ggtagacgag ggcgctgtgg agtcctgttt tggggggctg tcttggnaat 300
tcagctcctc gctggtgtca ctggaggcgg atctcaccag ggctggcctg gggctctcca 360
aggctgcctc tggtcgacgc ggccgcgaat tc 392

```

```

<210> 64
<211> 127
<212> PRT
<213> Homo sapiens

```

```

<220>
<221> UNSURE
<222> (30)...(30)
<223> Xaa = any amino acid

```

```

<400> 64
Ile Arg Gly Arg Val Asp Gln Arg Gln Pro Trp Arg Ala Pro Gly Gln
1      5      10      15
Pro Trp Asp Pro Pro Pro Val Thr Pro Ala Arg Ser Ile Xaa Lys Thr
20      25      30
Ala Pro Gln Asn Arg Thr Pro Gln Arg Pro Arg Leu Pro Pro Pro Pro
35      40      45
Thr Pro Ser Thr Ser Thr Ser Pro Trp Pro Trp Pro Lys Arg Gly Pro
50      55      60
Thr Arg Asn Ala Ala Ala Asn Gly Pro Leu Gln Met Asp Trp Ser Lys
65      70      75      80
Lys Asn Glu Leu Phe Arg Gln Pro Leu Ser Cys Pro Ala Ala Thr His
85      90      95
Val Thr Gly Arg Ala Glu Pro Ala Phe His Pro Thr Phe Phe Leu Leu
100     105     110
Pro Asn Tyr Ser Pro Glu Ser Met Tyr Lys Ser Ala Leu Gly Ser
115     120     125

```

```

<210> 65
<211> 577
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (551)...(575)
<223> n = A, C, G or T

```

```

<400> 65
ggatcctttc acaaaccag caaccatcac aaacagaagg acgagaatat taacagctgt 60
gaagacttta ttcacccaag cagactcttt tactccaaaa gacaaaagac ctgctagaag 120
taatataagg cacacagcaa aaaaatcggg atattctgca agaccagtgt aattcattct 180

```

```

gaagtatgtc ctcaaaaact gaccaatctg tttgctaaga agttcatcaa aggtgccact 240
ccaggctctt gcaacacttg atgtacctat cacatacgat aaaatgagat tccagccagt 300
gatgaaggcc cacagctctc cgacagtcac gtaggtgtac aaatatgcag acccgtctt 360
gggaacacgg gccccaaatt cggcatagca gaggccagcc atcactgaag ccagggcagc 420
aatgaggaag gacaccacga tgctggggcc cgagtctgcc ttggccacct cccagcgag 480
gacataaacc ccggcccca ggggtacttcc aacgccagg gcaatgaggt ccatggtgga 540
taagcagcgg nataatttgg ngnnntntan actgncc 577

```

<210> 66
 <211> 192
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)...(9)
 <223> Xaa = any amino acid

```

<400> 66
Xaa Ser Xaa Xaa Xaa Xaa Lys Leu Xaa Arg Cys Leu Ser Thr Met Asp
1      5      10      15
Leu Ile Ala Leu Gly Val Gly Ser Thr Leu Gly Ala Gly Val Tyr Val
20      25      30
Leu Ala Gly Glu Val Ala Lys Ala Asp Ser Gly Pro Ser Ile Val Val
35      40      45
Ser Phe Leu Ile Ala Ala Leu Ala Ser Val Met Ala Gly Leu Cys Tyr
50      55      60
Ala Glu Phe Gly Ala Arg Val Pro Lys Thr Gly Ser Ala Tyr Leu Tyr
65      70      75      80
Thr Tyr Val Thr Val Gly Glu Leu Trp Ala Phe Ile Thr Gly Trp Asn
85      90      95
Leu Ile Leu Ser Tyr Val Ile Gly Thr Ser Ser Val Ala Arg Ala Trp
100     105     110
Ser Gly Thr Phe Asp Glu Leu Leu Ser Lys Gln Ile Gly Gln Phe Leu
115     120     125
Arg Thr Tyr Phe Arg Met Asn Tyr Thr Gly Leu Ala Glu Tyr Pro Asp
130     135     140
Phe Phe Ala Val Cys Leu Ile Leu Leu Leu Ala Gly Leu Leu Ser Phe
145     150     155     160
Gly Val Lys Glu Ser Ala Trp Val Asn Lys Val Phe Thr Ala Val Asn
165     170     175
Ile Leu Val Leu Leu Phe Val Met Val Ala Gly Phe Val Lys Gly Ser
180     185     190

```

<210> 67
 <211> 719
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (500)...(714)
 <223> n = A, C, G or T

<400> 67
 ggatcctggt gcaagggcaa aaaaaaaaca caacacaaga aggaataagt cctgaattat 60
 tggcttcac acatccacct tctccacccc aaaatggcac aaaagaaaca gttaccacac 120
 cctgcagacc ttttggtgta aaagagatga tgatgaactg gggtggaac aggtcatgaa 180
 gatctgtcta aaaaagtccc attcaggtga gtttgtacac accatcaagc agcgagcctc 240
 tcatcaatta gggttaggga accaagggtc gattctcagg aaatcacaat ttcattcatt 300
 tactcaatat gaatttaca agtgcctaca tattatccgc ttccacttgc agccatttct 360
 agataaaaaa gaaacctggc atctcaaagg ggccaccaag ttctccccga gtctaccact 420
 gaaaggacct tttttggaaa taggtttctt ctgtacctct ggaagggtaa catcttaaag 480
 ctgaatcaac tttaacctgn agggctaaca tatttagcaa tacttgcatc ccagacatac 540
 aacattaaaa gatacactaa attctgaagg tagctatgct gcaaaatagt tttaaaatta 600
 aacaattgta cagtattcat ttatgcttgg aaattccagt cctagaccaa gcttgtggcc 660
 accancattg accgttcttg ccatccagaa gagctgacag tgtcagttta atancctgg 719

<210> 68
 <211> 227
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (2)...(67)
 <223> Xaa = any amino acid

<400> 68
 Arg Xaa Leu Asn His Cys Gln Leu Phe Trp Met Ala Arg Thr Val Asn
 1 5 10 15
 Xaa Gly Gly His Lys Leu Gly Leu Gly Leu Glu Phe Pro Ser Ile Asn
 20 25 30
 Glu Tyr Cys Thr Ile Val Phe Asn Tyr Phe Ala Ala Leu Pro Ser Glu
 35 40 45
 Phe Ser Val Ser Phe Asn Val Val Cys Leu Gly Cys Lys Tyr Cys Ile
 50 55 60
 Cys Pro Xaa Arg Leu Lys Leu Ile Gln Leu Asp Val Thr Leu Pro Glu
 65 70 75 80
 Val Gln Lys Lys Pro Ile Ser Lys Lys Gly Pro Phe Ser Gly Arg Leu
 85 90 95
 Gly Glu Asn Leu Val Ala Pro Leu Arg Cys Gln Val Ser Phe Leu Ser
 100 105 110
 Arg Asn Gly Cys Lys Trp Lys Arg Ile Ile Cys Arg His Phe Val Asn
 115 120 125
 Ser Tyr Val Asn Glu Asn Cys Asp Phe Leu Arg Ile Glu Pro Trp Phe
 130 135 140
 Pro Asn Pro Asn Glu Ala Arg Cys Leu Met Val Cys Thr Asn Ser Pro
 145 150 155 160

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Trp | Asp | Phe | Phe | Arg | Gln | Ile | Phe | Met | Thr | Cys | Ser | His | Pro | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ser | Ser | Ser | Ser | Leu | Leu | His | Gln | Lys | Val | Cys | Arg | Val | Trp | Leu | Phe |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Leu | Cys | His | Phe | Gly | Val | Glu | Lys | Val | Asp | Val | Met | Lys | Pro | Ile |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Ile | Gln | Asp | Leu | Phe | Leu | Leu | Val | Leu | Cys | Phe | Phe | Phe | Ala | Leu | Ala |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Pro | Gly | Ser | | | | | | | | | | | | | |
| 225 | | | | | | | | | | | | | | | |

<210> 69
 <211> 311
 <212> DNA
 <213> Homo sapiens

<400> 69
 ggatccgcgg tacgcccgcc cgtgctcgcg cgtcagcgac gcgatgtcct cgcgcacatctc 60
 gttgatgacc gggagcagaa actgctcgaa atcctcctcg ggctccagca cctccacttc 120
 ctccggttcc gccagctcga cgatgtccag gggccgcac tcttcccact gcctcggaac 180
 cgcaatagcg atgtctgttg gagagagaaa accgacactc gctatgctta gcaatagaga 240
 gcccgaaat tcttgaaaac ttttaccctt tttcaacttt tcttctcaga ggctcgacgcg 300
 gccgcgaatt c 311

<210> 70
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 70
 Ile Arg Gly Arg Val Asp Leu Glu Glu Lys Leu Lys Lys Gly Lys Ser
 1 5 10 15
 Phe Gln Glu Tyr Ser Gly Ser Leu Leu Ser Ile Ala Ser Val Gly
 20 25 30
 Phe Leu Ser Pro Thr Asp Ile Ala Ile Ala Val Pro Arg Gln Trp Glu
 35 40 45
 Glu Met Arg Pro Leu Asp Ile Val Glu Leu Ala Glu Pro Glu Glu Val
 50 55 60
 Glu Val Leu Glu Pro Glu Glu Asp Phe Glu Gln Phe Leu Leu Pro Val
 65 70 75 80
 Ile Asn Glu Met Arg Glu Asp Ile Ala Ser Leu Thr Arg Glu His Gly
 85 90 95
 Arg Ala Tyr Arg Gly Ser
 100

<210> 71
 <211> 501
 <212> DNA

<213> Homo sapiens

<400> 71

```
ggatccggtg ctgccaatta aaaaaaaaaac tgtaaatacat cttaccaccc aaaagtgata 60
tggaaaactg tttgaatctg agcatggaca tggttgtagt catcttttgg aattataagt 120
gaaagtgata ggtaactcct tgtgttccat ttctcagagt agattgctat atccaaatga 180
tcatgaacac ccctcccatc ccacactcag atggaaagca gccagaaccc ctgccactgg 240
attcttcagc acccttggga cagtctccaa ctgacacttc ccagcagggg aggagggcag 300
gcacctttgg tgactcttca gtgagactcc atcgacattc agaatcttaa aatgttggtg 360
atgaaaacca tggacctcca agtcatcctt accaacctta aatgtagtgt tgtgacatcc 420
aacgaaggac ttccacgtca cgtgggaata aatttgaaca gatacatcca attgaacata 480
ggtcgacgcg gccgcgaatt c 501
```

<210> 72

<211> 163

<212> PRT

<213> Homo sapiens

<400> 72

```
Glu Phe Ala Ala Ala Ser Thr Tyr Val Gln Leu Asp Val Ser Val Gln
1      5      10      15
Ile Tyr Ser His Val Thr Trp Lys Ser Phe Val Gly Cys His Asn Thr
20     25     30
Thr Phe Lys Val Gly Lys Asp Asp Leu Glu Val His Gly Phe His Tyr
35     40     45
Gln His Phe Lys Ile Leu Asn Val Asp Gly Val Ser Leu Lys Ser His
50     55     60
Gln Arg Cys Leu Pro Ser Ser Pro Ala Gly Lys Cys Gln Leu Glu Thr
65     70     75     80
Val Pro Arg Val Leu Lys Asn Pro Val Ala Gly Val Leu Ala Ala Phe
85     90     95
His Leu Ser Val Gly Trp Glu Gly Cys Ser Ser Phe Gly Tyr Ser Asn
100    105    110
Leu Leu Glu Met Glu His Lys Glu Leu Pro Ile Thr Phe Thr Tyr Asn
115    120    125
Ser Lys Arg Leu Gln Pro Cys Pro Cys Ser Asp Ser Asn Ser Phe Pro
130    135    140
Tyr His Phe Trp Val Val Arg Phe Thr Val Phe Phe Leu Ile Gly Ser
145    150    155    160
Thr Gly Ser
```

<210> 73

<211> 747

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (139)...(139)

<223> n = A, C, G or T

<400> 73

```
ggatcctggt gcttcaaaag tcaattttat agaatcccaa ggtgtctggt ctttggatat 60
gagtcggaaa tgaggaggat ttcttggaga aacttctggg gcaggaagat accagttttt 120
cctgatcaga aagtgcacnt ggaagatacc aaggaaaacc acaaagaggt gcattctcct 180
cacagtgagc tcggatacta tcattgatct caggaatgtg aggggttatg tgagaaattc 240
cagtataatc aaacccattg atccatattc cagagtcccg ttttaactgca tttccttcca 300
agtcattgaa tgttctagtc atatgctgaa gaaacactct ctttggcttc ggattagcag 360
gattggagct atatggaaaa aatgttccac tgcaaacaag gaggaatgta attgcaata 420
ccaaagttaa agtttagcatg gttttttttg tgctcttggc aaggtagatg aagttaatca 480
tgtaataaaa tcttttcgca agagtatgta taagtattat tttggctaca gttgcagttc 540
catacagaca aacggagacc atagaagtgg ttataccatg agagagactg tccaataaga 600
gagatgaaca ctgctataat gagaacggta acaaggctag tgaaccagct gatcaaagtg 660
atgccaagtc cacacaagaa gtccttcttg tagttaccag tcttatgttt gggctgcaaa 720
aattttttgc ccaggtacaa aacaaca 747
```

<210> 74

<211> 238

<212> PRT

<213> Homo sapiens

<400> 74

```
Cys Cys Phe Val Pro Gly Gln Lys Ile Phe Ala Ala Gln Thr Asp Trp
 1          5          10          15
Leu Gln Glu Gly Leu Leu Val Trp Thr Trp His His Phe Asp Gln Leu
      20          25          30
Val His Pro Cys Tyr Arg Ser His Tyr Ser Ser Val His Leu Ser Tyr
      35          40          45
Trp Thr Val Ser Leu Met Val Pro Leu Leu Trp Ser Pro Phe Val Cys
      50          55          60
Met Glu Leu Gln Leu Pro Lys Tyr Leu Tyr Ile Leu Leu Arg Lys Asp
 65          70          75          80
Phe Ile Thr Leu Thr Ser Ser Thr Leu Pro Arg Ala Gln Lys Lys Pro
      85          90          95
Cys Leu Leu Trp Tyr Val Gln Leu His Ser Ser Leu Phe Ala Val Glu
      100          105          110
His Phe Phe His Ile Ala Pro Ile Leu Leu Ile Arg Ser Gln Arg Glu
      115          120          125
Cys Phe Phe Ser Ile Leu Glu His Ser Met Thr Trp Lys Glu Met Gln
      130          135          140
Leu Asn Gly Thr Leu Glu Tyr Gly Ser Met Gly Leu Ile Ile Leu Glu
 145          150          155          160
Phe Leu Thr Pro Leu Thr Phe Leu Arg Ser Met Ile Val Ser Glu Leu
      165          170          175
Thr Val Arg Arg Met His Leu Phe Val Val Phe Leu Gly Ile Phe Xaa
      180          185          190
Val His Phe Leu Ile Arg Lys Asn Trp Tyr Leu Pro Ala Pro Glu Val
      195          200          205
```

Ser Pro Arg Asn Pro Pro His Phe Arg Leu Ile Ser Lys Glu Gln Thr
 210 215 220
 Pro Trp Asp Ser Ile Lys Leu Thr Phe Glu Ala Thr Gly Ser
 225 230 235

<210> 75
 <211> 712
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (712)...(712)
 <223> n = A, C, G or T

<400> 75
 ggatccgggc acttctaaac atctagatag actagatggt tcaagtaagg agttaatttg 60
 tctactatgt atacagcagt cttgaataaa ctgcaaacat gtaacaacag ttataatttg 120
 aaagagtctt ccaaagtga acattctggc ctagaaccct tcccatctcc atcaaccag 180
 aagacatcaa attttcagaa gacaatcttt cctaggactt gtaaaacaaa atgtacaaaa 240
 tatattagtt tactaactct acttttgtca tacactggca acctctttaa catccagaaa 300
 gactagatgt tgtcaattag gactcgtctg tcctttatgt acactatata cacagataag 360
 taaaacaaaa tgcacagaca taatgattca tcttgacctg ctgtaaacag gatggcatag 420
 agctctctgc acctccccct cctctctcct cccctgaacc actgcacaaa cacaatgagt 480
 attactcaac aggtgatttg gccattcccc cccaaaaata tttcctatga attgtaacaa 540
 aaaggtatgt acaaaatgtg attttgctac ctctaatttt aacatatcag gcacttcaga 600
 acatctaaaa agaagagaca tttcaaaaaa gcttagcatt gtcaactata tacacagtag 660
 tgaggaataa aatgcacaca aaacaatgga tagaatatga aaatgtcttc tn 712

<210> 76
 <211> 227
 <212> PRT
 <213> Homo sapiens

<400> 76
 Arg Arg His Phe His Ile Leu Ser Ile Val Leu Cys Ala Phe Tyr Ser
 1 5 10 15
 Ser Leu Leu Cys Ile Leu Thr Met Leu Ser Phe Phe Glu Met Ser Leu
 20 25 30
 Leu Phe Arg Cys Ser Glu Val Pro Asp Met Leu Lys Leu Glu Val Ala
 35 40 45
 Lys Ser His Phe Val Asn Thr Phe Leu Leu Gln Phe Ile Gly Asn Ile
 50 55 60
 Phe Gly Gly Glu Trp Pro Asn His Leu Leu Ser Asn Thr His Cys Val
 65 70 75 80
 Cys Ala Val Val Gln Gly Arg Arg Glu Glu Gly Glu Val Gln Arg Ala
 85 90 95
 Leu Cys His Pro Val Tyr Ser Glu Ala Arg Ile Ile Met Ser Val His
 100 105 110

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Val | Leu | Leu | Ile | Cys | Val | Tyr | Ser | Val | His | Lys | Gly | Gln | Thr | Ser |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Asn | Gln | His | Leu | Val | Phe | Leu | Asp | Val | Lys | Glu | Val | Ala | Ser | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Gln | Lys | Ser | Thr | Asn | Ile | Phe | Cys | Thr | Phe | Cys | Phe | Thr | Ser | Pro | Arg |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Lys | Asp | Cys | Leu | Leu | Lys | Ile | Cys | Leu | Leu | Gly | Trp | Arg | Trp | Glu | Gly |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Phe | Ala | Arg | Met | Phe | Thr | Phe | Gly | Arg | Leu | Phe | Gln | Ile | Ile | Thr | Val |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Val | Thr | Cys | Leu | Gln | Phe | Ile | Gln | Asp | Cys | Cys | Ile | His | Ser | Arg | Gln |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Ile | Asn | Ser | Leu | Leu | Glu | Thr | Ser | Ser | Leu | Ser | Arg | Cys | Leu | Glu | Val |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Pro | Gly | Ser | | | | | | | | | | | | | |
| 225 | | | | | | | | | | | | | | | |

<210> 77
 <211> 605
 <212> DNA
 <213> Homo sapiens

<400> 77

| | | | | | | |
|------------|------------|------------|-------------|-------------|-------------|-----|
| ggatccctgc | caaaggttta | aaggtatgtc | cgccatgcat | tcctcccca | agtgcacact | 60 |
| gatggcagat | acacttctta | caagtccagc | aaaatacact | aagtttttca | tgggtgatttt | 120 |
| cacatttgct | cttttcattt | tcttcattgt | tgggtgagact | gcagagttga | agagtatcaa | 180 |
| gctgttggtg | tacttcttct | gcccaacgac | aattttactag | ttctcgtagc | tggagtggag | 240 |
| cacggcaatg | aggacattga | gctctctgct | ctgtcagcca | gcgccataata | cagctgaaac | 300 |
| aacacagttt | ggagcaatga | ggacacaggc | gtgcatcccg | caatttctcc | atacaaatga | 360 |
| aacatcgga | aacctcagca | atgctctcca | cgctctgttc | atccattgcc | tccggctctc | 420 |
| ggcggggccg | ctggcgaccc | gcaggctccg | cagtctgacc | tcttaggcgc | cggcccgagg | 480 |
| tcgccagatc | aaatcgccga | taaaagcccg | gcgcccacgt | cagggggctc | tgacaaccgc | 540 |
| cccacctgcg | cgccccatct | cttcagggtc | agcgccgcct | accccgtcga | cgcgggccgcg | 600 |
| aattc | | | | | | 605 |

<210> 78
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 78

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Arg | Gly | Arg | Val | Asp | Gly | Val | Gly | Gly | Ala | Gly | Pro | Glu | Glu | Met |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Gly | Arg | Ala | Gly | Gly | Ala | Val | Val | Arg | Ala | Pro | Arg | Gly | Arg | Arg | Ala |
| | | 20 | | | | | | 25 | | | | 30 | | | |
| Phe | Ile | Gly | Asp | Leu | Ile | Trp | Arg | Pro | Arg | Ala | Gly | Ala | Glu | Val | Arg |
| | | 35 | | | | | 40 | | | | 45 | | | | |
| Leu | Arg | Ser | Leu | Arg | Val | Ala | Ser | Gly | Pro | Ala | Glu | Ser | Arg | Arg | Gln |
| 50 | | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Met | Asn | Arg | Ala | Trp | Arg | Ala | Leu | Leu | Arg | Phe | Ser | Asp | Val | Ser | 65 | 70 | 75 | 80 |
| Phe | Val | Trp | Arg | Asn | Cys | Gly | Met | His | Ala | Cys | Val | Leu | Ile | Ala | Pro | | 85 | 90 | 95 |
| Asn | Cys | Val | Val | Ser | Ala | Val | Leu | Gly | Ala | Gly | Gln | Ser | Arg | Glu | Leu | 100 | 105 | 110 | |
| Asn | Val | Leu | Ile | Ala | Val | Leu | His | Ser | Ser | Tyr | Glu | Asn | Ile | Val | Val | 115 | 120 | 125 | |
| Gly | Gln | Lys | Lys | His | Asn | Ser | Leu | Ile | Leu | Phe | Asn | Ser | Ala | Val | Ser | 130 | 135 | 140 | |
| Pro | Asn | Met | Lys | Lys | Met | Lys | Arg | Thr | Asn | Val | Lys | Ile | Thr | Met | Lys | 145 | 150 | 155 | 160 |
| Asn | Leu | Val | Tyr | Phe | Ala | Gly | Leu | Val | Arg | Ser | Val | Ser | Ala | Ile | Ser | 165 | 170 | 175 | |
| Val | His | Phe | Gly | Glu | Glu | Cys | Met | Ala | Asp | Ile | Pro | Leu | Asn | Leu | Trp | 180 | 185 | 190 | |
| Gln | Gly | Ser | | | | | | | | | | | | | | 195 | | | |

<210> 79
 <211> 875
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (569)...(875)
 <223> n = A, C, G or T

<400> 79

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|-----|
| ggatccatta | cctttgaaag | agccaaaaaa | caaaaaaaaaa | aaaaaaaaaa | aattaccatg | 60 |
| ccagttttat | tcccgttgaa | tatttacacc | ttggacagca | aaccttgctc | acataaagta | 120 |
| gaaaacagat | acaataaaac | atggccttgaa | aaatgaccag | agtatgcacc | tgtagtactg | 180 |
| tacactaaat | aaaatacaca | aggcagcaat | acttaggggc | cagaaacact | gcttactaca | 240 |
| agtcagttac | ggaatcataa | tttacagtaa | aaatgggcac | gtcccaaggc | tcaatttttc | 300 |
| tttttctttt | gtcattttaca | gtagaataaa | tattttgttg | ctattgctac | actttaattt | 360 |
| acattctaac | ctattaaatg | cagaaagcta | gtgtaaagca | tatagattaa | gtgtagggtcc | 420 |
| catacgtatg | acagtttggt | caagactagt | aggtttttgt | ttttgtatct | ttttttaact | 480 |
| tattaaatgg | ctagtgggaa | agatttgtgc | ttgtgatcag | ctcttaactt | caatttttaca | 540 |
| tcaaaacgtc | cctgaaaacg | gtctttctna | ctggacccaa | tgttctcacc | gtacgcctta | 600 |
| cactntatgc | gaattcagtg | tccatggtaa | gatgggtgaa | tgtacggccg | caaggggctt | 660 |
| naagtanttg | gcttgaagga | attgcctagt | ccggaatct | gcaaggaaac | caggggagtt | 720 |
| gccagtccaa | atctcccatt | ccacttatct | tacttattnn | ttgccgtgac | tgacggaagg | 780 |
| ctttgggtna | cttatcntgg | gaagntccag | gctatttttg | agctagttga | nctaactggt | 840 |
| gncttttaaaa | gccggttgcc | tttgaccaa | attan | | | 875 |

<210> 80
 <211> 276
 <212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (11)...(96)

<223> Xaa = any amino acid

<400> 80

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Asn | Phe | Gly | Gln | Arg | Gln | Pro | Ala | Phe | Lys | Xaa | Thr | Ser | Xaa | Asn | Leu | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Gln | Asn | Ser | Leu | Xaa | Leu | Pro | Xaa | Ile | Ser | Xaa | Pro | Lys | Pro | Ser | Val | |
| | | | 20 | | | | | 25 | | | | | 30 | | | |
| Ser | His | Gly | Xaa | Xaa | Val | Arg | Val | Glu | Trp | Glu | Ile | Trp | Thr | Gly | Asn | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Ser | Pro | Gly | Phe | Leu | Ala | Asp | Phe | Arg | Thr | Arg | Gln | Phe | Leu | Gln | Ala | |
| | 50 | | | | | 55 | | | | | 60 | | | | | |
| Xaa | Tyr | Xaa | Lys | Pro | Leu | Ala | Ala | Val | His | Ser | Pro | Ile | Leu | Pro | Trp | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | |
| Thr | Leu | Asn | Ser | His | Xaa | Val | Gly | Val | Arg | Glu | His | Trp | Val | Gln | Xaa | |
| | | | | 85 | | | | | 90 | | | | | 95 | | |
| Glu | Arg | Pro | Phe | Ser | Gly | Thr | Phe | Cys | Lys | Ile | Glu | Val | Lys | Ser | Ser | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Gln | Ala | Gln | Ile | Phe | Pro | Thr | Ser | His | Leu | Ile | Ser | Lys | Lys | Ile | Gln | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Lys | Gln | Lys | Pro | Thr | Ser | Leu | Glu | Gln | Thr | Val | Ile | Arg | Met | Gly | Pro | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Thr | Leu | Asn | Leu | Tyr | Ala | Leu | His | Leu | Ser | Ala | Phe | Asn | Arg | Leu | Glu | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Cys | Lys | Leu | Lys | Cys | Ser | Asn | Ser | Asn | Lys | Ile | Phe | Ile | Leu | Leu | Met | |
| | | | | 165 | | | | | 170 | | | | | 175 | | |
| Thr | Lys | Glu | Lys | Glu | Lys | Leu | Ser | Leu | Gly | Thr | Cys | Pro | Phe | Leu | Leu | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| Ile | Met | Ile | Pro | Leu | Thr | Cys | Ser | Lys | Gln | Cys | Phe | Trp | Pro | Leu | Ser | |
| | | 195 | | | | | 200 | | | | | 205 | | | | |
| Ile | Ala | Ala | Leu | Cys | Ile | Leu | Phe | Ser | Val | Gln | Tyr | Tyr | Arg | Cys | Ile | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |
| Leu | Trp | Ser | Phe | Phe | Lys | Pro | Cys | Phe | Ile | Val | Ser | Val | Phe | Tyr | Phe | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| Met | Ala | Arg | Phe | Ala | Val | Gln | Gly | Val | Asn | Ile | Gln | Arg | Glu | Asn | Trp | |
| | | | | 245 | | | | | 250 | | | | | 255 | | |
| His | Gly | Asn | Phe | Phe | Phe | Phe | Phe | Phe | Leu | Phe | Phe | Gly | Ser | Phe | Lys | |
| | | | 260 | | | | | 265 | | | | | | | | |
| Gly | Asn | Gly | Ser | | | | | | | | | | 270 | | | |
| | | | 275 | | | | | | | | | | | | | |

<210> 81

<211> 631

<212> DNA

<213> Homo sapiens

<400> 81

```
ggatccctcc acctcgatct tgccgcagtc tgcgatgata acatccttca ggggtttatc 60
ccggctgtct gtcttggtgc tctccacctt ccgcaccacc tccatgccct ctagaacttt 120
gccaaacacc acatgcttgc catctagcca ggctgtcttg actgtcgtga tgaagaactg 180
ggagccgttg gtgtctttgc ctgctgtggc catgctcacc cagccaggcc cgtagtgctt 240
cagtttgaag ttctcatcgg ggaagcgctc accgtagatg ctctttcctc ctgtgccatc 300
tcccctggtg aagtctccgc cctggatcat gaagtccttg attacacgat ggaatttgct 360
gtttttgtag ccaaaccctt tctctcctgt agctaaggcc acaaaattat ccactgtttt 420
tggaacagtc tttccgaaga gaccaaagat caccgcgcct acatcttcat ctccaattcg 480
taggtcaaaa tacaccttga cgggtgacttt gggccccttc ttcttctcat cggccgcaga 540
aggtcccggc agcagcagga agaagacgga ccccgcgatg aaggcggcgg caaggagcac 600
ccttatgttg cgtcgacgcg gccgcgaatt c 631
```

<210> 82

<211> 210

<212> PRT

<213> Homo sapiens

<400> 82

```
Asn Ser Arg Pro Arg Arg Arg Asn Ile Arg Val Leu Leu Ala Ala Ala
1      5      10      15
Phe Ile Ala Gly Ser Val Phe Phe Leu Leu Leu Pro Gly Pro Ser Ala
20      25      30
Ala Asp Glu Lys Lys Lys Gly Pro Lys Val Thr Val Lys Val Tyr Phe
35      40      45
Asp Leu Arg Ile Gly Asp Glu Asp Val Gly Arg Val Ile Phe Gly Leu
50      55      60
Phe Gly Lys Thr Val Pro Lys Thr Val Asp Asn Phe Val Ala Leu Ala
65      70      75      80
Thr Gly Glu Lys Gly Phe Gly Tyr Lys Asn Ser Lys Phe His Arg Val
85      90      95
Ile Lys Asp Phe Met Ile Gln Gly Gly Asp Phe Thr Arg Gly Asp Gly
100     105     110
Thr Gly Gly Lys Ser Ile Tyr Gly Glu Arg Phe Pro Asp Glu Asn Phe
115     120     125
Lys Leu Lys His Tyr Gly Pro Gly Trp Val Ser Met Ala Asn Ala Gly
130     135     140
Lys Asp Thr Asn Gly Ser Gln Phe Phe Ile Thr Thr Val Lys Thr Ala
145     150     155     160
Trp Leu Asp Gly Lys His Val Val Phe Gly Lys Val Leu Glu Gly Met
165     170     175
Glu Val Val Arg Lys Val Glu Ser Thr Lys Thr Asp Ser Arg Asp Lys
180     185     190
Pro Leu Lys Asp Val Ile Ile Ala Asp Cys Gly Lys Ile Glu Val Glu
195     200     205
Gly Ser
210
```

<210> 83
 <211> 452
 <212> DNA
 <213> Homo sapiens

<400> 83
 ggatccgccc attgtaattc catgaataag tgcaacataa ggtttctggc aagaacctga 60
 aagaaacaga gcaacagcat tattcagcat atattcttct ctgaagaaaa ctggagctat 120
 cttctgtttt gccttttcag cttccgagat cactaggaag gaaagattac aaataaaaaa 180
 aaaaagattt aatagtcaac attgtcaact agatcaaaag tattatgaaa attaaatact 240
 gggggaaggg agtactctaa aatgacttgt taaaagtttt gaagttgccc ctgccacaga 300
 cattatatta tagtcacaga tccatagtcc aatgtcaaag cttcaaggca aaaattccta 360
 ttcttgtttt ccatgtcttct tacaaaatgt tagattagaa attataggct gggcatgggtg 420
 gctcaaacct gtgtcgacgc ggccgcgaat tc 452

<210> 84
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 84
 Ile Arg Gly Arg Val Asp Thr Gly Leu Ser His His Ala Gln Pro Ile
 1 5 10 15
 Ile Ser Asn Leu Thr Phe Cys Lys Lys His Gly Lys Gln Glu Glu Phe
 20 25 30
 Leu Pro Ser Phe Asp Ile Gly Leu Trp Ile Cys Asp Tyr Asn Ile Met
 35 40 45
 Ser Val Ala Gly Ala Thr Ser Lys Leu Leu Thr Ser His Phe Arg Val
 50 55 60
 Leu Pro Ser Pro Ser Ile Phe Ser Tyr Phe Ser Ser Gln Cys Leu Leu
 65 70 75 80
 Asn Leu Phe Phe Phe Ile Cys Asn Leu Ser Phe Leu Val Ile Ser Glu
 85 90 95
 Ala Glu Lys Ala Lys Gln Lys Ile Ala Pro Val Phe Phe Arg Glu Glu
 100 105 110
 Tyr Met Leu Asn Asn Ala Val Ala Leu Phe Leu Ser Gly Ser Cys Gln
 115 120 125
 Lys Pro Tyr Val Ala Leu Ile His Gly Ile Thr Met Gly Gly Ser
 130 135 140

<210> 85
 <211> 752
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (462)...(748)
 <223> n = A, C, G or T

<400> 85

```
ggatccggtc aggggaaaga agggccggtg ctggatctgg cagtaccaga gcagcagcaa 60
cagcaggagc agcaggggca gcagcaggct gccgatttcc agcccggagg ggccgggctc 120
ggaccccggc gggcaggggg gatttggggg accgactctc gtggacacgt ggcagtggag 180
aacgcagttg ggagggaggt gaaggctgcc caggggtctg gtgtcgtcgc ctagcagctg 240
cccttggtag atgagtcgca cctgctgttc ccggccggga aactgggtcc ttttcaagga 300
gccaatggtg tcgtggggcc aggccctggc cacctgctct gaatcattga ggaatttcag 360
cccgtagcac gaggggctcc tgcggggagt ccgggggctg cggtgttgct gtgaaccccg 420
tgctgggctc tggctgtgca gcttgacctt ctggtgtctc angctggggg tctctgcccc 480
tggggccttc cctctcatgc tgtcggtagc tgccatggct tgccgctggg ctgggatggc 540
gttggggctc ctgacggctg gggcaatggg tccccggcct tnacggtgtg ccttgaaaac 600
ccagccangg ccaacaccag aanggcaagg caagcncgga naaaaggacg gtcacttcat 660
cacccaaccc ntnatcang gtcatngcgc ctggcttgcc cgccggcnta ccganccgcg 720
ggttcccccان ttccttnacc cggccggnaa tt 752
```

<210> 86

<211> 247

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (1)...(94)

<223> Xaa = any amino acid

<400> 86

```
Xaa Pro Ala Gly Xaa Arg Xaa Trp Gly Thr Arg Arg Ser Val Xaa Arg
 1          5          10          15
Arg Ala Ser Gln Ala Xaa Pro Xaa Xaa Gly Trp Val Met Lys Pro Ser
          20          25          30
Phe Xaa Arg Xaa Leu Pro Cys Xaa Ser Gly Val Gly Xaa Gly Trp Val
          35          40          45
Phe Lys Ala His Arg Xaa Gly Arg Gly Pro Ile Ala Pro Ala Val Arg
          50          55          60
Asp Pro Asn Ala Ile Pro Ala Gln Arg Gln Ala Met Ala Ala Thr Asp
65          70          75          80
Ser Met Arg Gly Lys Ala Pro Gly Ala Glu Thr Pro Ser Xaa Arg His
          85          90          95
Gln Lys Val Lys Leu His Ser Gln Ser Pro Ala Arg Gly Ser Gln Gln
          100          105          110
His Arg Gln Pro Arg Thr Pro Arg Arg Ser Pro Ser Cys Tyr Gly Leu
          115          120          125
Lys Phe Leu Asn Asp Ser Glu Gln Val Ala Arg Ala Trp Pro His Asp
          130          135          140
Thr Ile Gly Ser Leu Lys Arg Thr Gln Phe Pro Gly Arg Glu Gln Gln
145          150          155          160
Val Arg Leu Ile Tyr Gln Gly Gln Leu Leu Gly Asp Asp Thr Gln Thr
          165          170          175
Leu Gly Ser Leu His Leu Pro Pro Asn Cys Val Leu His Cys His Val
```

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| Ser | Thr | Arg | Val | Gly | Pro | Pro | Asn | Pro | Pro | Cys | Pro | Pro | Gly | Ser | Glu | |
| | | 195 | | | | | 200 | | | | | 205 | | | | |
| Pro | Gly | Pro | Ser | Gly | Leu | Glu | Ile | Gly | Ser | Leu | Leu | Leu | Pro | Leu | Leu | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |
| Leu | Leu | Leu | Leu | Leu | Leu | Leu | Trp | Tyr | Cys | Gln | Ile | Gln | Tyr | Arg | Pro | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| Phe | Phe | Pro | Leu | Thr | Gly | Ser | | | | | | | | | | |
| | | | | 245 | | | | | | | | | | | | |

<210> 87
 <211> 396
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (375)...(395)
 <223> n = A, C, G or T

<400> 87
 ggatcccaga gtattctgac agataaaatc ggggaggcag ttatgaatac cactctcaca 60
 ctcgtcaata tctttgcagc tattgtcctc tgtgagctca tagccagtc cgcagctgct 120
 gtcccgtctg cagcggaag agccactgt gttgatgcag gattctccaa gccggcagct 180
 gtggctgccc gtgatgcatt cattgacatc ttcacaggag acaccatcag acagcagctg 240
 gtagccacg aagcaggagc agaccacctc gtcacccgtg tctcggcact gctgcttgca 300
 gggccgcct cctcggcagc ggtcattcag atatgggtcc tcttgttcct cctcaacctc 360
 aatgatctta tccgnnttg gangccccc acntnc 396

<210> 88
 <211> 132
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)...(8)
 <223> Xaa = any amino acid

<400> 88
 Xaa Xaa Xaa Gly Xaa Pro Xaa Xaa Asp Lys Ile Ile Glu Val Glu Glu
 1 5 10 15
 Glu Gln Glu Asp Pro Tyr Leu Asn Asp Arg Cys Arg Gly Gly Gly Pro
 20 25 30
 Cys Lys Gln Gln Cys Arg Asp Thr Gly Asp Glu Val Val Cys Ser Cys
 35 40 45
 Phe Val Gly Tyr Gln Leu Leu Ser Asp Gly Val Ser Cys Glu Asp Val
 50 55 60
 Asn Glu Cys Ile Thr Gly Ser His Ser Cys Arg Leu Gly Glu Ser Cys

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ile | Asn | Thr | Val | Gly | Ser | Phe | Arg | Cys | Gln | Arg | Asp | Ser | Ser | Cys | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Thr | Gly | Tyr | Glu | Leu | Thr | Glu | Asp | Asn | Ser | Cys | Lys | Asp | Ile | Asp | Glu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Cys | Glu | Ser | Gly | Ile | His | Asn | Cys | Leu | Pro | Asp | Phe | Ile | Cys | Gln | Asn |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Thr | Leu | Gly | Ser | | | | | | | | | | | | |
| | 130 | | | | | | | | | | | | | | |

<210> 89
 <211> 558
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> unsure
 <222> (304)...(513)
 <223> n = A, C, G or T

<400> 89
 ggatccagac ccacgaggga catatgaatt ttcattcagc agcttgatgg tgctggtgaa 60
 gtctgtgctg tccagtttct ccgacaactt tctcttcagg tcatcccaat ataagcgacg 120
 tgctgcaggg aagtcctctc ctggctcctc cctcactgga gactcggttc ctgccagtct 180
 ctcacactca gtttttggtt ctaccctttt acaatagccc aagtagccaa tcataaatcc 240
 aatcaagaaa aagacgatca cagcaatagt cccatagcag atacttccac tacacctttt 300
 tggnttttgt acattggcct ttgtgttatt gtcagcattt tcttcttcat ctacagcaag 360
 tttcatctnc acatgactgt tatcgccatc tacttgccga gccaggctga accgggtata 420
 tgacaatggt tctccaccaa acaagttaga gaatgctgat ctagcttgat ccatcattct 480
 gaactgccac acagaagaca ctagecgcgc ctncgtcccg agccgcaccc gatatcccgt 540
 cgacgcggcc gcgaattc 558

<210> 90
 <211> 186
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> UNSURE
 <222> (16)...(85)
 <223> Xaa = any amino acid

| | | | | | | | | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 90 | | | | | | | | | | | | | | | |
| Glu | Phe | Ala | Ala | Ala | Ser | Thr | Gly | Tyr | Arg | Val | Arg | Leu | Gly | Thr | Xaa |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asp | Ala | Leu | Val | Ser | Ser | Val | Trp | Gln | Phe | Arg | Met | Met | Asp | Gln | Ala |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Arg | Ser | Ala | Phe | Ser | Asn | Leu | Phe | Gly | Gly | Glu | Pro | Leu | Ser | Tyr | Thr |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Phe | Ser | Leu | Ala | Arg | Gln | Val | Asp | Gly | Asp | Asn | Ser | His | Val | Xaa |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Met | Lys | Leu | Ala | Val | Asp | Glu | Glu | Glu | Asn | Ala | Asp | Asn | Asn | Thr | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ala | Asn | Val | Thr | Xaa | Pro | Lys | Arg | Cys | Ser | Gly | Ser | Ile | Cys | Tyr | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Thr | Ile | Ala | Val | Ile | Val | Phe | Phe | Leu | Ile | Gly | Phe | Met | Ile | Gly | Tyr |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Gly | Tyr | Cys | Lys | Gly | Val | Glu | Pro | Lys | Thr | Glu | Cys | Glu | Arg | Leu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Ala | Gly | Thr | Glu | Ser | Pro | Val | Arg | Glu | Glu | Pro | Gly | Glu | Asp | Phe | Pro |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ala | Ala | Arg | Arg | Leu | Tyr | Trp | Asp | Asp | Leu | Lys | Arg | Lys | Leu | Ser | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Lys | Leu | Asp | Ser | Thr | Asp | Phe | Thr | Ser | Thr | Ile | Lys | Leu | Leu | Asn | Glu |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Asn | Ser | Tyr | Val | Pro | Arg | Gly | Ser | Gly | Ser | | | | | | |
| | | | 180 | | | | | 185 | | | | | | | |

<210> 91
 <211> 461
 <212> DNA
 <213> Homo sapiens

<400> 91
 ggatcccttt gtatataaaa tgggtgaaagc tgacttgaat gtgccgtcac cactctgctg 60
 ggaaaaacag atgaaggtgg cccagagaaa accacagact ccagcgtag ctgttctcca 120
 ttgaacagga acaaggctga agttgggtcag ctgtacaaag ggccagtaca tcagtccact 180
 cagataggta ttccagaatt tctgtttcag gtccaaaaat atgtcatcct ttccttgag 240
 aatgctcata ccgacataga aggccgagac cgcgatgggc gcaccgacca cctggtcgca 300
 cagcaacttg gccagcaggg cgtgcggcgc tcggcccggg agcgcgcgct ccagcaggcg 360
 cagccacacg tagttgaagt tggcgtggaa ggtcaccacc aacgtggcca cgcgccgcgt 420
 ctggcgccag ttggcctcgc ggtcgacgcg gccgcgaatt c 461

<210> 92
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 92
 Ile Arg Gly Arg Val Asp Arg Glu Ala Asn Trp Arg Gln Thr Arg Arg
 1 5 10 15
 Val Ala Thr Leu Val Val Thr Phe His Ala Asn Phe Asn Tyr Val Trp
 20 25 30
 Leu Arg Leu Leu Glu Arg Ala Leu Pro Gly Arg Ala Pro His Ala Leu
 35 40 45
 Leu Ala Lys Leu Leu Cys Asp Gln Val Val Gly Ala Pro Ile Ala Val
 50 55 60
 Ser Ala Phe Tyr Val Gly Met Ser Ile Leu Gln Gly Lys Asp Asp Ile

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Phe | Leu | Asp | Leu | Lys | Gln | Lys | Phe | Trp | Asn | Thr | Tyr | Leu | Ser | Gly | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Met | Tyr | Trp | Pro | Phe | Val | Gln | Leu | Thr | Asn | Phe | Ser | Leu | Val | Pro | Val |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Gln | Trp | Arg | Thr | Ala | Tyr | Ala | Gly | Val | Cys | Gly | Phe | Leu | Trp | Ala | Thr |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Phe | Ile | Cys | Phe | Ser | Gln | Gln | Ser | Gly | Asp | Gly | Thr | Phe | Lys | Ser | Ala |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Phe | Thr | Ile | Leu | Tyr | Thr | Lys | Gly | Ser | | | | | | | |
| 145 | | | | | | 150 | | | | | | | | | |

<210> 93
 <211> 603
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (21)...(574)
 <223> n = A, C, G or T

<400> 93

| | | | | | | |
|------------|-------------|------------|------------|------------|-------------|-----|
| ggatccagtg | ctataataaac | nattacacac | attgtaactc | ctacacaatt | tgaaatttttc | 60 |
| aagttaagac | aaaggtaact | atatatagaa | gcagtatggt | ttctgaaccc | ttacagattg | 120 |
| ttttgcacac | tcctggatta | cacacatctc | atcaatctca | agaataaaat | caaagtcctt | 180 |
| ggcttgacag | ccttccacaa | tctgacctct | gttttctcgc | cagcctcatc | tcctgtcatt | 240 |
| cacaacattt | ccagcattcc | aaccagtctg | aacttttgca | gtttcccacg | tgcgctaggc | 300 |
| tctttcttca | tcagcatctc | tatgcatgct | gtctcctgct | actggaatgc | cctcattctc | 360 |
| gttgcttcct | gttttgaaga | aaagctgtga | taccggcaac | agtgtttaag | tatcacacgg | 420 |
| gtagttaaaa | ggcaagttgg | tcctatctga | catgtggaaa | tggccagctc | gttagaaggc | 480 |
| agtacctggt | gaagcccggg | cacgcgagtt | cacgccagcg | acagtggaaa | gcccttcct | 540 |
| ngcaagcgcg | cttccggcac | tagccgnacc | ccgncgagct | ctggtcgacg | cggccgcgaa | 600 |
| ttc | | | | | | 603 |

<210> 94
 <211> 195
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (13)...(189)
 <223> Xaa = any amino acid

<400> 94

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Phe | Ala | Ala | Ala | Ser | Thr | Arg | Ala | Arg | Arg | Gly | Xaa | Ala | Ser | Ala |
| 1 | | | | | 5 | | | | 10 | | | | 15 | | |
| Gly | Ser | Ala | Leu | Ala | Arg | Glu | Gly | Leu | Ser | Thr | Val | Ala | Gly | Val | Asn |

<210> 96
 <211> 258
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (8)...(70)
 <223> Xaa = any amino acid

<400> 96
 Lys Arg Lys Ile Glu Phe Ile Xaa Xaa His Pro Ile Leu Lys Lys Ala
 1 5 10 15
 Arg Pro Arg Asn Phe Xaa Pro Xaa Gln Phe Ser Ile Gly Phe Gln Xaa
 20 25 30
 Lys Ser Xaa Ser Arg Leu Xaa His Gln Xaa Xaa Ile Lys Asp Pro Phe
 35 40 45
 Leu Asn Lys Xaa Met Arg Phe Ile Pro Val Glu Ala Ile Arg Thr Val
 50 55 60
 Ala Asn Val Ser Ile Xaa Asn Val Tyr Ile Lys Leu Ser Gly Lys Leu
 65 70 75 80
 Arg Leu Ser Trp Ile Phe Gly Leu Pro Leu His Ile Ser Ser Asn Gly
 85 90 95
 Asn Asp Gln Lys Cys Thr Gln Tyr Lys Pro Leu Phe Lys Thr Thr Pro
 100 105 110
 Lys Thr Lys Gln Lys Trp Leu Arg Thr Thr Glu Arg Leu Leu Cys Val
 115 120 125
 Pro Asp Val Lys Asp Gly Pro Arg Gly Tyr Leu His Gly Leu Asn Cys
 130 135 140
 Glu Gly Lys Ile Lys Thr Ser Thr Ser Ile Ser Pro Glu Asp Leu Val
 145 150 155 160
 Cys Cys Glu Leu Ser Phe Val Glu Ser Asp Leu Val Ser Val Pro Leu
 165 170 175
 Cys Pro Ser Ile Gly Pro Leu Cys Ser Leu Leu Ala Phe Gly Leu Ser
 180 185 190
 Ser Gly Thr Ser Ala Phe Gly Leu Gly Leu Met Met Gly Leu Gln Lys
 195 200 205
 Leu Ser Ser Ser Phe Asp Phe Ala Thr Ile Ser Glu Thr Phe Thr Thr
 210 215 220
 Gly Ser Val Arg Leu Ser Leu Phe Cys Ala Phe Ile Leu Leu Phe Ser
 225 230 235 240
 Gln Leu Met Ala Ser Leu Ile His Phe Ser Thr Phe Ser Ile Ser Val
 245 250 255
 Gly Ser

<210> 97
 <211> 478

<212> DNA

<213> Homo sapiens

<400> 97

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ggatccgggg tcgaagcagt tggattccat gatgggaagg ccattggcct ctcggtatTT 60
cacaagcctc tcagcttcgc ggcgggacca ctctttcatc ctgtagtcag gcagataggc 120
cacaaaggTg ctgccaaagg ccaggatgat ggagacgcca aagaagaaga caagtcgcat 180
gttccagacg tccaaaacgg ggtccttgTc ataaccatgg gagtctgggt tcttctcata 240
caagttttcg tctcggggtt ctgggtcctc ttgccacggT gtggtcgggt ctggggggccg 300
ctttcccgcc acagcggacg gggcgaccac agtcctggag aagctagatt cccagcggac 360
gcgggcgggc gggagccctc gcgtcgccgc tgccgcaaaa agacggcgag cgctcaaacc 420
aaacagccca gccgcatga cagatggTgc ttgcaggggt cgacgcggcc gcgaattc 478
```

<210> 98

<211> 159

<212> PRT

<213> Homo sapiens

<400> 98

```
Asn Ser Arg Pro Arg Arg Pro Leu Gln Ala Pro Ser Val Met Ala Ala
 1           5           10           15
Gly Leu Phe Gly Leu Ser Ala Arg Arg Leu Leu Ala Ala Ala Thr
          20           25           30
Arg Gly Leu Pro Ala Ala Arg Val Arg Trp Glu Ser Ser Phe Ser Arg
          35           40           45
Thr Val Val Ala Pro Ser Ala Val Ala Gly Lys Arg Pro Pro Glu Pro
          50           55           60
Thr Thr Pro Trp Gln Glu Asp Pro Glu Pro Glu Asp Glu Asn Leu Tyr
65          70          75          80
Glu Lys Asn Pro Asp Ser His Gly Tyr Asp Lys Asp Pro Val Leu Asp
          85          90          95
Val Trp Asn Met Arg Leu Val Phe Phe Phe Gly Val Ser Ile Ile Leu
          100          105          110
Val Leu Gly Ser Thr Phe Val Ala Tyr Leu Pro Asp Tyr Arg Met Lys
          115          120          125
Glu Trp Ser Arg Arg Glu Ala Glu Arg Leu Val Lys Tyr Arg Glu Ala
          130          135          140
Asn Gly Leu Pro Ile Met Glu Ser Asn Cys Phe Asp Pro Gly Ser
145          150          155
```

<210> 99

<211> 258

<212> DNA

<213> Homo sapiens

<400> 99

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ggatcctgag tagggcaata tctccaggca gaagtcccgg aaatccaagc agcaggtgcc 60
aaggccagag cacgtcgggt ggcaggaaca tggcccgtcc agggcgccac agcgcattga 120
gcagctctct tgggcatctg ctgtgggtcc ggggcccggg ccgagggctg tcgccagcag 180
```


cagcagggcc cagggcagga gggctggctt catgggtgcag cctgtgtctg cagccagcgt 240
cgacgcggcc gcgaattc 258

<210> 100
<211> 86
<212> PRT
<213> Homo sapiens

<400> 100
Glu Phe Ala Ala Ala Ser Thr Leu Ala Ala Asp Thr Gly Cys Thr Met
1 5 10 15
Lys Pro Ala Leu Leu Pro Trp Ala Leu Leu Leu Leu Ala Thr Ala Leu
20 25 30
Gly Pro Gly Pro Gly Pro Thr Ala Asp Ala Gln Glu Ser Cys Ser Met
35 40 45
Arg Cys Gly Ala Leu Asp Gly Pro Cys Ser Cys His Pro Thr Cys Ser
50 55 60
Gly Leu Gly Thr Cys Cys Leu Asp Phe Arg Asp Phe Cys Leu Glu Ile
65 70 75 80
Leu Pro Tyr Ser Gly Ser
85

<210> 101
<211> 664
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (524)...(662)
<223> n = A, C, G or T

<400> 101
ggatccctga aagtgaaca gaaagtacag catctgcacc aaattctcca agaacaccgt 60
taacacctcc gcctgcttct ggtgcttcca gtaccacaga tgtttgcagt gtatttgatt 120
ccgatcattc gagccctttt cactcaagca atgataaccgt ctttatccaa gttactctgc 180
cccatggccc aagatctgct tctgtatcat ctataagttt aaccaaaggc actgatgaag 240
tgctgtgccc tcctcctggt cctccacgaa gacgaccaga atctgcccc a gcagaatctt 300
caccatctaa gattatgtct aagcatttgg acagtcccc agccattcct cctaggcaac 360
ccacatcaaa agcctattca ccacgatatt caatatcaga ccggacctct atctcagacc 420
ctcctgaaag ccctccctta ttaccaccac gaaggaaaaa aaacctggag cactgtgttc 480
taactaccat cattccacct cccctttggg caaaaaggac atgnaatgct tnttccaaca 540
ggccttgccc ttacaccact ctctnaacac tttctacgac aagangattg catacacatg 600
ccagaagggn ctcttctgtt ggcgctgtct cngaaagatt taattctact ctcaaactna 660
angg 664

<210> 102
<211> 207
<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (1)...(43)

<223> Xaa = any amino acid

<400> 102

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Xaa | Xaa | Val | Glu | Asn | Ile | Phe | Xaa | Arg | Gln | Arg | His | Xaa | Lys | Xaa | Pro | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Phe | Trp | His | Val | Tyr | Ala | Ile | Xaa | Leu | Ser | Lys | Val | Xaa | Arg | Glu | Trp | |
| | | | 20 | | | | | 25 | | | | | 30 | | | |
| Cys | Lys | Gly | Lys | Ala | Cys | Trp | Xaa | Lys | His | Xaa | Met | Ser | Phe | Leu | Pro | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Lys | Gly | Glu | Val | Glu | Trp | Leu | Glu | His | Ser | Ala | Pro | Gly | Phe | Phe | Ser | |
| | 50 | | | | | 55 | | | | | 60 | | | | | |
| Phe | Val | Val | Val | Ile | Arg | Glu | Gly | Phe | Gln | Glu | Gly | Leu | Arg | Arg | Ser | |
| 65 | | | | 70 | | | | | 75 | | | | | | 80 | |
| Gly | Leu | Ile | Leu | Asn | Ile | Val | Val | Asn | Arg | Leu | Leu | Met | Trp | Val | Ala | |
| | | | 85 | | | | | 90 | | | | | | 95 | | |
| Glu | Glu | Trp | Leu | Gly | Asp | Cys | Pro | Asn | Ala | Thr | Ser | Met | Val | Lys | Ile | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Leu | Leu | Gly | Gln | Ile | Leu | Val | Val | Phe | Val | Glu | Glu | Gln | Glu | Glu | Gly | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Gln | Ala | Leu | His | Gln | Cys | Leu | Trp | Leu | Asn | Leu | Met | Ile | Gln | Lys | Gln | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Ile | Leu | Gly | His | Gly | Ala | Glu | Leu | Gly | Arg | Arg | Tyr | His | Cys | Leu | Ser | |
| 145 | | | | | 150 | | | | 155 | | | | | | 160 | |
| Glu | Lys | Gly | Ser | Asn | Asp | Arg | Asn | Gln | Ile | His | Cys | Lys | His | Leu | Trp | |
| | | | 165 | | | | | 170 | | | | | | 175 | | |
| Tyr | Trp | Lys | His | Gln | Lys | Gln | Ala | Glu | Val | Leu | Thr | Val | Phe | Leu | Glu | |
| | | 180 | | | | | | 185 | | | | | 190 | | | |
| Asn | Leu | Val | Gln | Met | Leu | Tyr | Phe | Leu | Phe | His | Phe | Gln | Gly | Ser | | |
| | 195 | | | | | | 200 | | | | | | 205 | | | |

<210> 103

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (464)...(746)

<223> n = A, C, G or T

<400> 103

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| ggatcccact | gcaagcccca | ccaggcggta | ggggaagaag | caggaggcca | ggaaggcagc | 60 |
| ccagagcgcc | acatacagct | tctgtgtgat | ctccggctgg | acccacatga | acaagttctt | 120 |
| gatcttctcc | aggatgtcag | ccatcttccc | gaaaagggttc | tgggctttct | gggcgacgctc | 180 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cagcaccagc | tggaacttct | cagacacagt | caggtcttcc | tttgagggtt | ccacgggctc | 240 |
| agacacttcg | ggcacgatgc | tccactgtat | ccgccacccc | ctggcgatga | ggtaattgag | 300 |
| ggataacctc | agaattgcta | gaaataagaa | caatgggatg | gccagccat | gccacacggc | 360 |
| attcatgtac | acggtgaagg | caatggcaga | cgtgtagacg | gagtaccagt | cggataaggc | 420 |
| agagaggttc | ttcacaaagt | tagtgaccgg | cttttggggg | gggnaccgct | tgaccgctat | 480 |
| ttttagtaac | ctgcggcgct | caggggttcc | tnttgtctcc | acagtgtctc | ctcggctgga | 540 |
| accgggaagt | ccttcacagt | acttccccga | accggttcgt | aaaaccactt | tttgcaggcc | 600 |
| ccgaggacag | gcccttggtc | tccggngct | tntgnttcca | ttgngtggcc | tgggccctgc | 660 |
| cctttttggg | ggcttggttg | annccatctg | ctncttcggt | tntgggcctt | nancaccttc | 720 |
| ttggaccntt | ttggttcaag | ttncantccg | gccggttggc | cq | | 762 |

```
<220>
<221> UNSURE
<222> (6)...(99)
<223> Xaa = any amino acid
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gln | Lys | Leu | Tyr | Val | Ala | Leu | Trp | Ala | Ala | Phe | Leu | Ala | Ser | Cys |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Phe | Phe | Pro | Tyr | Arg | Leu | Val | Gly | Leu | Ala | Val | Gly | Ser | | | |
| | | | | 245 | | | | | 250 | | | | | | |

<210> 105
 <211> 676
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (606)...(671)
 <223> n = A, C, G or T

<400> 105

| | | | | | | |
|------------|-------------|------------|------------|-------------|------------|-----|
| ggatccaggc | atgagttctg | tcctttgaac | tccatagtga | ccccttttta | ccttgttcca | 60 |
| gatgaggaca | ggtgtcggga | ttccgatgac | ctcacagctc | aagtacacct | gggcaccagt | 120 |
| gacattccag | atgtccttgg | ggggcgtcac | tatggaagga | ccttgctcgc | aggtgccctt | 180 |
| gctgacctgg | gtgatggcct | tctccccgcg | gctctcggcc | ctctggctgg | cggcgcgag | 240 |
| ctggcagccg | ctcgggtagg | tggtgccgtc | gctgccgcac | accgggtagc | ggctcttgca | 300 |
| cacgcacacg | ccgccttacac | ccggaccgcc | ggctgctgcc | ccggctttac | ccttccgcct | 360 |
| cttgcggtc | ttcacgcact | ccatgcccg | cgcgagtagc | cccctgccgg | cgccgccacc | 420 |
| cccgcacggc | tcgccctcgc | cgcgggcgca | catagggcag | cagccgcacg | cgtcgcgggg | 480 |
| ctcgcccagc | aggcagccca | gcgggggcag | gggcgggcag | gaggccggct | cgcaggggcc | 540 |
| gcaggtgtcc | gaagaggagg | aagaggagag | gggcaggagc | aggagcagca | gccagcggc | 600 |
| gccgangagc | anggcgcgca | acgacggccg | cttcatggcg | gggtgcgggtg | gcagcggtcn | 660 |
| acncggccgc | naatta | | | | | 676 |

<210> 106
 <211> 225
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (2)...(24)
 <223> Xaa = any amino acid

<400> 106

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Xaa | Arg | Pro | Xaa | Xaa | Pro | Leu | Pro | Pro | His | Pro | Ala | Met | Lys | Arg |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Pro | Ser | Leu | Arg | Ala | Xaa | Leu | Xaa | Gly | Ala | Ala | Gly | Leu | Leu | Leu | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Leu | Leu | Pro | Leu | Ser | Ser | Ser | Ser | Ser | Ser | Asp | Thr | Cys | Gly | Pro | Cys |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Glu | Pro | Ala | Ser | Cys | Pro | Pro | Leu | Pro | Pro | Leu | Gly | Cys | Leu | Leu | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Glu | Thr | Arg | Asp | Ala | Cys | Gly | Cys | Cys | Pro | Met | Cys | Ala | Arg | Gly | Glu |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Gly | Glu | Pro | Cys | Gly | Gly | Gly | Gly | Ala | Gly | Arg | Gly | Tyr | Cys | Ala | Pro |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Gly | Met | Glu | Cys | Val | Lys | Ser | Arg | Lys | Arg | Arg | Lys | Gly | Lys | Ala | Gly |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ala | Ala | Ala | Gly | Gly | Pro | Gly | Val | Ser | Gly | Val | Cys | Val | Cys | Lys | Ser |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Arg | Tyr | Pro | Val | Cys | Gly | Ser | Asp | Gly | Thr | Thr | Tyr | Pro | Ser | Gly | Cys |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Gln | Leu | Arg | Ala | Ala | Ser | Gln | Arg | Ala | Glu | Ser | Arg | Gly | Glu | Lys | Ala |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ile | Thr | Gln | Val | Ser | Lys | Gly | Thr | Cys | Glu | Gln | Gly | Pro | Ser | Ile | Val |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Thr | Pro | Pro | Lys | Asp | Ile | Trp | Asn | Val | Thr | Gly | Ala | Gln | Val | Tyr | Leu |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ser | Cys | Glu | Val | Ile | Gly | Ile | Pro | Thr | Pro | Val | Leu | Ile | Trp | Asn | Lys |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Val | Lys | Arg | Gly | His | Tyr | Gly | Val | Gln | Arg | Thr | Glu | Leu | Met | Pro | Gly |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ser | | | | | | | | | | | | | | | |
| 225 | | | | | | | | | | | | | | | |

<210> 107
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 107
 ggatcctgta gccgtgatgg tggctcgagg agcaatccag tgcacagtaa aagagttggc 60
 agtaatatca gaaaagtcaa tgccagttgg ggaatcaaga cctgttttct gtcttcctct 120
 aagagggtgtg ctctcatggt gttcgtagac actggagaca ctactacat attctgtacc 180
 aggcaggaga tttgttaaga ccactgcatt gtctgaagga gaaattgaca actctgcaac 240
 atcttccgtc gacgcggccg cgaattc 267

<210> 108
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 108
 Glu Phe Ala Ala Ala Ser Thr Glu Asp Val Ala Glu Leu Ser Ile Ser
 1 5 10 15
 Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu Leu Pro Gly Thr Glu
 20 25 30
 Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gln His Glu Ser Thr Pro
 35 40 45
 Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp Ser Pro Thr Gly Ile Asp
 50 55 60
 Phe Ser Asp Ile Thr Ala Asn Ser Phe Thr Val His Trp Ile Ala Pro

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Arg | Ser | Pro | Ala | Trp | Ala | Pro | Xaa | Ile | Met | Asp | Pro | Lys | Leu | Cys |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Val | Arg | Ala | His | Cys | His | Asp | Gly | Met | Xaa | His | His | Leu | Pro | Gln | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ala | Asp | Xaa | Arg | Thr | Ala | Ala | Leu | Ala | Cys | Leu | Ile | Trp | Thr | Val | Arg |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Ser | Arg | His | Gln | Leu | Ala | Met | Leu | Cys | Ser | Pro | Cys | Ile | Leu | Leu | Tyr |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Gly | Met | Thr | Leu | Cys | Cys | Leu | Arg | Tyr | Val | Trp | Ala | Met | Asp | Leu | Arg |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Glu | Leu | Pro | Thr | Thr | Leu | Gly | Pro | Val | Ser | Leu | Arg | Gln | Leu | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Glu | His | Thr | Arg | Tyr | Pro | Cys | Leu | Asp | Leu | Gly | Ala | Met | Leu | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Tyr | Thr | Leu | Thr | Phe | Trp | Leu | Leu | Leu | Arg | Gln | Phe | Val | Lys | Glu | Lys |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Leu | Leu | Lys | Trp | Ala | Glu | Ser | Pro | Ala | Ala | Leu | Thr | Glu | Val | Thr | Val |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ala | Asp | Thr | Glu | Pro | Thr | Arg | Thr | Gln | Thr | Leu | Leu | Gln | Ser | Leu | Gly |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Glu | Leu | Val | Lys | Gly | Val | Tyr | Ala | Lys | Tyr | Trp | Ile | Tyr | Val | Cys | Ala |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Gly | Met | Phe | Ile | Val | Val | Ser | Phe | Ala | Gly | Arg | Leu | Val | Val | Tyr | Lys |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Ile | Val | Tyr | Met | Phe | Leu | Phe | Leu | Leu | Cys | Leu | Thr | Leu | Phe | Gln | Val |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Tyr | Tyr | Ser | Leu | Trp | Arg | Lys | Leu | Leu | Lys | Ala | Phe | Trp | Trp | Leu | Val |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Val | Ala | Tyr | Thr | Met | Leu | Val | Leu | Ile | Ala | Val | Tyr | Thr | Phe | Gln | Phe |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Gln | Asp | Phe | Pro | Ala | Tyr | Trp | Arg | Asn | Leu | Thr | Gly | Gly | Ser | | |
| | 290 | | | | | 295 | | | | | 300 | | | | |

<210> 111
 <211> 818
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (701)...(817)
 <223> n = A, C, G, or T

<400> 111
 ggatccaggc acaatgttgt cacaatagca aaaagcaaata ttaggataa tacaatatag 60
 aaatttccca gccaatataa ccttccaaag tcgccaagta gatcaaatac agtgattccc 120
 agtggttctcg acatcacagg cagagcagag ctcaaaacca agatggacac acaatttcca 180
 atgatctttg tcatagttgt gtcatttttc ttgggagtaa agtttccaaa aaatcgaagg 240
 ctatagaagc cgacaacaga ggacaccata agatagaaaa tcaaatgat ttcaagcgca 300

```

gctccacaa aaccaaactg agaaagagag gcatttccta ttccaggccc ccttggttcct 360
tttggcattg ctgtttcatc aaccaatagg caaagaatat tacaagccac caagaggacc 420
gagatggatg tctcaataag aaggagaacc ataacagcgg gatacaccaa atttctttcc 480
catgctgaag ccttttttcg cctctctaata tttgtcttaa gagtctttac attttcaagt 540
tcttggttcca actccattat gttgtattcc accgatgaag acagcccatt tagtcgtctc 600
tggagtgtct cttcctctaa ggtaatgata taaatttggt catccagggtc ttcagaattg 660
ttggcttcac tagcaactga cccatcactg tgaactacga naaanggcaa ctggtgtacn 720
caaganaagt aacaacntcc atcatgattt caggatntaa tagggagatg nactnccana 780
atcattttaag atnctgcttg cggatcgttg gcatgang 818

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<210> 112

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (8)...(38)

<223> Xaa = any amino acid

<400> 112

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Ser Cys Gln Arg Ser Ala Ser Xaa Ile Leu Asn Asp Xaa Gly Ser Xaa
1      5      10      15
Ser Pro Tyr Xaa Ile Leu Lys Ser Trp Xaa Leu Leu Leu Xaa Leu Xaa
20      25      30
Thr Pro Val Ala Xaa Xaa Arg Ser Ser Gln Trp Val Ser Cys Ser Gln
35      40      45
Gln Phe Arg Pro Gly Thr Asn Leu Tyr His Tyr Leu Arg Gly Arg Ser
50      55      60
Thr Pro Glu Thr Thr Lys Trp Ala Val Phe Ile Gly Gly Ile Gln His
65      70      75      80
Asn Gly Val Gly Thr Arg Thr Lys Cys Lys Asp Ser Asp Lys Ile Arg
85      90      95
Glu Ala Lys Lys Gly Phe Ser Met Gly Lys Lys Phe Gly Val Ser Arg
100     105     110
Cys Tyr Gly Ser Pro Ser Tyr Asp Ile His Leu Gly Pro Leu Gly Gly
115     120     125
Leu Tyr Ser Leu Pro Ile Gly Asn Ser Asn Ala Lys Arg Asn Lys Gly
130     135     140
Ala Trp Asn Arg Lys Cys Leu Ser Phe Tyr Val Trp Phe Cys Gly Ser
145     150     155     160
Cys Ala Asn His Phe Asp Phe Leu Ser Tyr Gly Val Leu Cys Cys Arg
165     170     175
Leu Leu Pro Ser Ile Phe Trp Lys Leu Tyr Ser Gln Glu Arg His Asn
180     185     190
Tyr Asp Lys Asp His Trp Lys Leu Cys Val His Leu Gly Phe Glu Leu
195     200     205
Cys Ser Ala Cys Asp Val Glu Asn Thr Gly Asn His Ile Ser Thr Trp
210     215     220
Arg Leu Trp Lys Val Leu Ala Gly Lys Phe Leu Tyr Cys Ile Ile Leu

```


| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Val | Arg | Gly | Ala | Ala | Val | Gln | Ser | Gly | Pro | Xaa | Val | Lys | Lys | Pro |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Gly | Xaa | Ser | Leu | Lys | Ile | Ser | Cys | Lys | Gly | Ser | Gly | Tyr | Tyr | Phe | Ser |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Tyr | Trp | Ile | Ala | Trp | Val | Arg | Gln | Met | Pro | Gly | Lys | Gly | Leu | Glu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Trp | Met | Gly | Ile | Ile | Tyr | Pro | Gly | Asp | Ser | Asp | Ala | Thr | Tyr | Ser | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ser | Phe | Gln | Gly | Gln | Val | Thr | Met | Ser | Val | Asp | Lys | Ser | Ile | Ser | Thr |
| | | 115 | | | | | | 120 | | | | 125 | | | |
| Ala | Tyr | Leu | Gln | Trp | Ser | Ser | Leu | Lys | Ala | Ser | Asp | Thr | Ala | Met | Tyr |
| | | 130 | | | | | 135 | | | | 140 | | | | |
| Tyr | Cys | Ala | Arg | Leu | Ala | Glu | Met | Ala | Thr | Ser | Tyr | Gln | Trp | Gly | Gln |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gly | Thr | Leu | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Phe | Pro | Leu | Ala | Pro | Ser | Ser | Lys | Ser | Thr | Ser | Gly | Gly | Thr | Ala | Ala |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Trp | Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Leu | Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Ser | Ser | Ser | Leu | Gly | Thr | Gln | Thr | Tyr | Ile | Cys | Asn | Val | Asn | His | Lys |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Pro | Ser | Asn | Thr | Lys | Val | Asp | Lys | Arg | Val | Glu | Pro | Lys | Ser | Cys | Asp |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Lys | Thr | His | Thr | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Glu | Leu | Leu | Gly | Gly |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Pro | Ser | Val | Phe | Leu | Phe | Pro | Pro | Lys | Pro | Asn | Gly | Ser | | | |
| | 290 | | | | | 295 | | | | | 300 | | | | |

<210> 115
 <211> 458
 <212> DNA
 <213> Homo sapiens

<400> 115
 ggatccggct ctgaccttct ccacgtcggc ccgggccgctc tggtaattgt ccacgctgcc 60
 tgggatgtag gagcactgct ggttctggtc ccgagtgtcc tccgtgtggt acagcacagc 120
 ccacctgccg gcagctgaca cgttgaccca caggcatggg tactggggca ctttcttgcc 180
 cttcagctcc tcctgggtccc tgatgttggt ctcaatcagg tggcacttgg attcctgggt 240
 ccacacgctt ttctggtaga ggggcagcac agtcgtgacc aggatgtagt aggtgatgac 300
 ggcacacacc accatgggta caccagggca aagggtcgt gtctctcccc gtttctgggc 360
 catcaccagc ttcttcacca tattcactgg gggcagtgat catttagtct tcccggcgctc 420
 ctgtgggtct tgagcagcgt cgacgcggcc gcgaattc 458

<210> 116

<211> 151
 <212> PRT
 <213> Homo sapiens

<400> 116
 Ile Arg Gly Arg Val Asp Ala Ala Gln Asp Pro Gln Asp Ala Gly Lys
 1 5 10 15
 Thr Lys Ser Leu Pro Pro Val Asn Met Val Lys Lys Leu Val Met Ala
 20 25 30
 Gln Lys Arg Gly Glu Thr Arg Ala Leu Cys Leu Gly Val Thr Met Val
 35 40 45
 Val Cys Ala Val Ile Thr Tyr Tyr Ile Leu Val Thr Thr Val Leu Pro
 50 55 60
 Leu Tyr Gln Lys Ser Val Trp Thr Gln Glu Ser Lys Cys His Leu Ile
 65 70 75 80
 Glu Thr Asn Ile Arg Asp Gln Glu Glu Leu Lys Gly Lys Lys Val Pro
 85 90 95
 Gln Tyr Pro Cys Leu Trp Val Asn Val Ser Ala Ala Gly Arg Trp Ala
 100 105 110
 Val Leu Tyr His Thr Glu Asp Thr Arg Asp Gln Asn Gln Gln Cys Ser
 115 120 125
 Tyr Ile Pro Gly Ser Val Asp Asn Tyr Gln Thr Ala Arg Ala Asp Val
 130 135 140
 Glu Lys Val Arg Ala Gly Ser
 145 150

<210> 117
 <211> 715
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (669)...(710)
 <223> n = A, C, G or T

<400> 117
 ggatcctgct tccaggcgct tctcattctc atggatcttc ttcacccgca gcttctgctt 60
 ctcagtcaga aggttggtgt cctcatccct ctcatcacagg gtgaccagga cgttcttgag 120
 ccagtcccgc atgcgcaggg ggaattcggc cagctcagag tccaggcaag gggggatgta 180
 tttgcaaggc ccgatgtagt ccaggtggag cttgtggccc ttcttggtgc cctccagggt 240
 gcactttgtg gcaaagaagt ggcaggaaga gtcgaaggct ttgttgtcat tgctgcacac 300
 cttctcaaac tcgccaatgg gggctgggca gctggtgggg tcctggcaca cgcacatggg 360
 ggtggtgttc tcatccagct cgcacacctt gccgtgtttg cagtgggtgt tctggcaggg 420
 attttccgcc accacctcct cttcggtttc ctctgcacca tcatcaaatt ctctacttc 480
 cacctggaca ggattagctc ccacagatac ctcagtcacc tctgccacag tttcttccac 540
 cacctctgtc tcatcaggca gggcttcttg ctgaggggct gccaaaggccc tcccggccag 600
 gcaaaggaga aagaagatcc aggccctcat ggtgctggga accctcagtg gcaggcaggc 660
 aggcggcgang canancgcgc tctccgggca gtctgggtcga cncggccgcn aattc 715

<210> 118
 <211> 238
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (2)...(16)
 <223> Xaa = any amino acid

<400> 118
 Asn Xaa Arg Pro Xaa Arg Pro Asp Cys Pro Glu Ser Ala Xaa Cys Xaa
 1 5 10 15
 Pro Pro Ala Cys Leu Pro Leu Arg Val Pro Ser Thr Met Arg Ala Trp
 20 25 30
 Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu Ala Ala Pro Gln
 35 40 45
 Gln Glu Ala Leu Pro Asp Glu Thr Glu Val Val Glu Glu Thr Val Ala
 50 55 60
 Glu Val Thr Glu Val Ser Val Gly Ala Asn Pro Val Gln Val Glu Val
 65 70 75 80
 Gly Glu Phe Asp Asp Gly Ala Glu Glu Thr Glu Glu Glu Val Val Ala
 85 90 95
 Glu Asn Pro Cys Gln Asn His His Cys Lys His Gly Lys Val Cys Glu
 100 105 110
 Leu Asp Glu Asn Asn Thr Pro Met Cys Val Cys Gln Asp Pro Thr Ser
 115 120 125
 Cys Pro Ala Pro Ile Gly Glu Phe Glu Lys Val Cys Ser Asn Asp Asn
 130 135 140
 Lys Thr Phe Asp Ser Ser Cys His Phe Phe Ala Thr Lys Cys Thr Leu
 145 150 155 160
 Glu Gly Thr Lys Lys Gly His Lys Leu His Leu Asp Tyr Ile Gly Pro
 165 170 175
 Cys Lys Tyr Ile Pro Pro Cys Leu Asp Ser Glu Leu Thr Glu Phe Pro
 180 185 190
 Leu Arg Met Arg Asp Trp Leu Lys Asn Val Leu Val Thr Leu Tyr Glu
 195 200 205
 Arg Asp Glu Asp Asn Asn Leu Leu Thr Glu Lys Gln Lys Leu Arg Val
 210 215 220
 Lys Lys Ile His Glu Asn Glu Lys Arg Leu Glu Ala Gly Ser
 225 230 235

<210> 119
 <211> 467
 <212> DNA
 <213> Homo sapiens

<400> 119

```

ggatcccttg tgggtccgcca ctccgaggtg tccgtccagt ggccgcgggtc ccgcgggggac 60
cccgggggcgc tgctgggtgc tgctctccgc cgccgggtgc gagctgccgg tggccgacgc 120
ctgctgctgc tgttgctgct gctgctgctg ctgctgcggg ggccgctcct tctggccgcc 180
gaggctgctg tacactagca acaagctggt gcacatggtg gtgagcgcta aacacactgc 240
cagaccatgg cgcatacagg tcttcatttt gggcacctct tttgtgcaga atcctcaggc 300
tcgcgcgtcc gggggccactt tttcctggag ggtttccatg atgggtaatg gggcggaggc 360
ggctctgatt tttgcccagc agccggccgc ggcagatcgc gcgcgggagc cgcgggaccc 420
gggaagcgcg gctgttgcag agattaggtc gacgcggccg cgaattc 467

```

```

<210> 120
<211> 154
<212> PRT
<213> Homo sapiens

```

```

<400> 120
Ile Arg Gly Arg Val Asp Leu Ile Ser Ala Thr Ala Ala Leu Pro Gly
1      5      10      15
Ser Arg Gly Ser Arg Ala Arg Ser Ala Ala Gly Cys Trp Ala Lys
20     25     30
Ile Arg Ala Ala Ser Ala Pro Leu Pro Ile Met Glu Thr Leu Gln Glu
35     40     45
Lys Val Ala Pro Asp Ala Arg Ala Gly Phe Cys Thr Lys Glu Val Pro
50     55     60
Lys Met Lys Thr Leu Met Arg His Gly Leu Ala Val Cys Leu Ala Leu
65     70     75     80
Thr Thr Met Cys Thr Ser Leu Leu Leu Val Tyr Ser Ser Leu Gly Gly
85     90     95
Gln Lys Glu Arg Pro Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln
100    105    110
Gln Gln Ala Ser Ala Thr Gly Ser Ser Gln Pro Ala Ala Glu Ser Ser
115    120    125
Thr Gln Gln Arg Pro Gly Val Pro Ala Gly Pro Arg Pro Leu Asp Gly
130    135    140
Tyr Leu Gly Val Ala Asp His Lys Gly Ser
145    150

```

```

<210> 121
<211> 859
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (28)...(857)
<223> n = A, C, G or T

```

```

<400> 121
ggatccacac acatcctcac cccacagnaa actgctggac aactgaaga aactgaataa 60

```

```

aacagatgaa gaaataagca gttaaaaaaa taagtcgccc ctccaaaaca cgcccccatc 120
ccacagcgct ccgcagcttc ccaccaccgc ccgcctcagt tcctttgcgt ctgttgccctc 180
cccagccctg cacgccctgg ctggcactgt tgccgctgca ttctcgtgtt cagtgatgcc 240
ctcttcttgt ttgaaacaaa agaaaataat gcatttgtgt ttttaaaaag agtatcttat 300
acatgtatcc taaaaagaga agctcatgtg caattgggtg acagcaggag aaatttctgg 360
actgttagga tgaatggacg ccttctcccc gttattttaag atttgtgacc ttgtacataa 420
ccctgggtga cgtgcacatt gcttgggtat ggaacggtag aaatttgggt gtttttaaaa 480
ccttgtttgg ggttgttcct gtccttggtg agaatcatag agatgtctgt gttcttggag 540
tatttcacac tgaggactaa tctgctatct tcattccagt ccctaccctc cagtgcctgc 600
tctcatccaa ataacctggg aggtgacaat caggatatct caggaggtcc aaggtggaac 660
agacctcttt gccttttcca gcgtctcata cccccggtag tgcanctgtg ggtggaggct 720
ggggtgtctg caccaantca gggcagcgtc ctntcttcna gcctgtactg gcccttcccc 780
ancctgggtc cccagggctg ggatccccag ggantncttc cntttaanna aagggccctg 840
acngggaaaa acaactncc                                     859

```

<210> 122
 <211> 278
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (1)...(269)
 <223> Xaa = any amino acid

<400> 122

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Val | Val | Phe | Pro | Xaa | Gln | Gly | Pro | Xaa | Xaa | Lys | Xaa | Lys | Xaa | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Leu | Gly | Ile | Pro | Ala | Leu | Gly | Thr | Gln | Xaa | Gly | Lys | Gly | Pro | Val | Gln |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ala | Xaa | Lys | Xaa | Asp | Ala | Ala | Leu | Xaa | Trp | Cys | Arg | His | Pro | Ser | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| His | Pro | Gln | Xaa | His | Tyr | Arg | Gly | Tyr | Glu | Thr | Leu | Xaa | Lys | Ala | Lys |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Arg | Ser | Val | Pro | Pro | Trp | Thr | Ser | Asp | Ile | Leu | Ile | Val | Thr | Ser | Gln |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Val | Ile | Trp | Met | Arg | Ala | Gly | Thr | Glu | Gly | Gly | Leu | Glu | Arg | Gln | Ile |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Ser | Pro | Gln | Cys | Glu | Ile | Leu | Gln | Glu | His | Arg | His | Leu | Tyr | Asp | Ser |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Gln | Gln | Gly | Gln | Glu | Gln | Pro | Gln | Thr | Arg | Phe | Lys | His | Pro | Asn | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Tyr | Arg | Ser | Ile | Pro | Lys | Gln | Cys | Ala | Arg | His | Pro | Gly | Leu | Cys | Thr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | Ser | Gln | Ile | Leu | Asn | Asn | Gly | Glu | Lys | Ala | Ser | Ile | His | Pro | Asn |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ser | Pro | Glu | Ile | Ser | Pro | Ala | Val | His | Gln | Leu | His | Met | Ser | Phe | Ser |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Phe | Asp | Thr | Cys | Ile | Arg | Tyr | Ser | Phe | Lys | Thr | Gln | Cys | Ile | Ile | Phe |
| | | | 180 | | | | | 185 | | | | | 190 | | |

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Phe | Cys | Phe | Lys | Gln | Glu | Glu | Gly | Ile | Thr | Glu | His | Glu | Asn | Ala | Ala | |
| | | 195 | | | | | 200 | | | | | 205 | | | | |
| Ala | Thr | Val | Pro | Ala | Arg | Ala | Cys | Arg | Ala | Gly | Glu | Ala | Thr | Asp | Ala | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |
| Lys | Glu | Leu | Arg | Arg | Ala | Val | Val | Gly | Ser | Cys | Gly | Ala | Leu | Trp | Asp | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| Gly | Gly | Val | Phe | Trp | Arg | Gly | Asp | Leu | Phe | Phe | Leu | Leu | Ile | Ser | Ser | |
| | | | 245 | | | | | | 250 | | | | | 255 | | |
| Ser | Val | Leu | Phe | Ser | Phe | Phe | Ser | Val | Ser | Ser | Ser | Xaa | Leu | Trp | Gly | |
| | | | 260 | | | | | 265 | | | | | 270 | | | |
| Glu | Asp | Val | Cys | Gly | Ser | | | | | | | | | | | |
| | | 275 | | | | | | | | | | | | | | |

<210> 123
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 123
 ggatccatca tatgtgtcta ctgtggggac aactggagtg aaaacttcgg ttgctggcag 60
 gtccgtggga aaatcagtga ccagttcatc agattcatca gaatgggtgag actcatcaga 120
 ctggtgagaa tcatcagtgt catctacatc atcagagtcg tttgagtcaa tggagtcctg 180
 gctgtccaca tgggtcatcat catcttcacat atccatatca tccatgtggg catggctttc 240
 gttggactta cttggaaggg tctgtggggc taggagattc tgcttctgag atgggtcagg 300
 gtttagccat gtggccacag catctgggta tttgttgtaa agctgctttt cctcagaact 360
 tccagaatca gcctgtttta ctggtatggc acaggtgatg cctaggaggc aaaagcaa 420
 cactggtcga cgcggccgcg aattcgcggc cgcgtcgacg tcgacgcgcc gcgaattc 478

<210> 124
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 124
 Asn Ser Arg Arg Val Asp Val Asp Ala Ala Ala Asn Ser Arg Pro Arg
 1 5 10 15
 Arg Pro Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala Ile Pro
 20 25 30
 Val Lys Gln Ala Asp Ser Gly Ser Ser Glu Glu Lys Gln Leu Tyr Asn
 35 40 45
 Lys Tyr Pro Asp Ala Val Ala Thr Trp Leu Asn Pro Asp Pro Ser Gln
 50 55 60
 Lys Gln Asn Leu Leu Ala Pro Gln Thr Leu Pro Ser Lys Ser Asn Glu
 65 70 75 80
 Ser His Asp His Met Asp Asp Met Asp Asp Glu Asp Asp Asp Asp His
 85 90 95
 Val Asp Ser Gln Asp Ser Ile Asp Ser Asn Asp Ser Asp Asp Val Asp
 100 105 110
 Asp Thr Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser Asp Glu

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 115 | | 120 | | 125 | | | | | | | | | | |
| Ser | Asp | Glu | Leu | Val | Thr | Asp | Phe | Pro | Thr | Asp | Leu | Pro | Ala | Thr | Glu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Phe | Thr | Pro | Val | Val | Pro | Thr | Val | Asp | Thr | Tyr | Asp | Gly | Ser | |
| 145 | | | | | 150 | | | | | 155 | | | | | |

<210> 125
 <211> 889
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> unsure
 <222> (743)...(888)
 <223> n = A, C, G or T

<400> 125

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggatccgctt | ttgtgtgcaa | acaatggcaa | acaatggcag | caaaccacag | cccagctgac | 60 |
| agccattaag | atggagtatt | catttgtcat | ggtgggtaaa | ggctcttcaa | tagctgctaa | 120 |
| tcaaaataga | gaaaaatgaa | tgtatggcac | gatgcaactc | taataagact | gggtgtccaa | 180 |
| atgagtgact | ccacataggt | atgcgtaagg | cgtacatgga | atgaccttct | ctttgaactt | 240 |
| gctgccaccg | tggagcagca | tatctccctt | gagaacttcc | tcccttgact | tccgaggaga | 300 |
| tcttactctc | tcatttctga | ccgacctttc | tttaccttgt | tcttcccacc | cattccctca | 360 |
| atgagacagt | ccccagcca | ctgctctctg | ttcaaattcc | ctgcgtgact | gatgccctgg | 420 |
| ggaagatccc | ttctcctaaa | tcttatgggg | atttaagaat | attacttgtc | cagctgcagc | 480 |
| caaagtggac | atggcatttg | gacgcagatg | tgcttgtgct | tacctaaata | ctcattctaa | 540 |
| agatggcaaa | gactgggact | ttcatgtatt | catttccgac | actctcattc | ccagatactg | 600 |
| agctagaagc | tggtgatgca | gatacaagac | tggtgttccc | aaggaactta | aaaaaccatc | 660 |
| ctccctgtca | ctgtagtggc | tgccatgggt | tgactatacc | aagtactctg | ctaactgctt | 720 |
| tacttatgca | atcccaccta | atnctcacag | caacccagtg | aggnggctac | taggataatt | 780 |
| ccttttcctt | ttcctttttt | tttttttttg | anacggattt | nctnttggtg | cccagctgga | 840 |
| ggcaangggc | gaactcgggt | actgaaaccc | ctnctctnng | gtnancnt | | 889 |

<210> 126
 <211> 285
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> UNSURE
 <222> (1)...(47)
 <223> Xaa = any amino acid

<400> 126

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Xaa | Thr | Xaa | Glu | Xaa | Gly | Phe | Gln | Pro | Ser | Ser | Pro | Xaa | Ala | Ser |
| 1 | | | 5 | | | | | | 10 | | | | | 15 | |
| Ser | Trp | Ala | Thr | Xaa | Xaa | Asn | Pro | Xaa | Gln | Lys | Lys | Lys | Lys | Arg | Lys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Arg | Lys | Arg | Asn | Tyr | Pro | Ser | Ser | Xaa | Leu | Thr | Gly | Leu | Leu | Xaa | Leu |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 35 | | | | 40 | | | | 45 | | | | | |
| Gly | Gly | Ile | Ala | Val | Lys | Gln | Leu | Ala | Glu | Tyr | Leu | Val | Ser | Thr | His |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Ser | His | Tyr | Ser | Asp | Arg | Glu | Asp | Gly | Phe | Leu | Ser | Ser | Leu | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Thr | Pro | Val | Leu | Tyr | Leu | His | His | Gln | Leu | Leu | Ala | Gln | Tyr | Leu | Gly |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Met | Arg | Val | Ser | Glu | Met | Asn | Thr | Lys | Ser | Gln | Ser | Leu | Pro | Ser | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Glu | Val | Phe | Arg | Ala | Gln | Ala | His | Leu | Arg | Pro | Asn | Ala | Met | Ser | Thr |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | Ala | Ala | Ala | Gly | Gln | Val | Ile | Phe | Leu | Asn | Pro | His | Lys | Ile | Glu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Lys | Gly | Ser | Ser | Pro | Gly | His | Gln | Ser | Arg | Arg | Glu | Phe | Glu | Gln | Arg |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ala | Val | Ala | Gly | Gly | Leu | Ser | His | Gly | Asn | Gly | Trp | Glu | Glu | Gln | Gly |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Lys | Glu | Arg | Ser | Val | Arg | Asn | Glu | Arg | Val | Arg | Ser | Pro | Arg | Lys | Ser |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Arg | Glu | Glu | Val | Leu | Lys | Gly | Asp | Met | Leu | Leu | His | Gly | Gly | Ser | Lys |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Phe | Lys | Glu | Lys | Val | Ile | Pro | Cys | Thr | Pro | Tyr | Ala | Tyr | Leu | Cys | Gly |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Val | Thr | His | Leu | Asp | Thr | Gln | Ser | Tyr | Ser | Cys | Ile | Val | Pro | Tyr | Ile |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| His | Phe | Ser | Leu | Phe | Leu | Ala | Ala | Ile | Glu | Glu | Pro | Leu | Pro | Thr | Met |
| | | | 245 | | | | | | 250 | | | | | 255 | |
| Thr | Asn | Glu | Tyr | Ser | Ile | Leu | Met | Ala | Val | Ser | Trp | Ala | Val | Val | Cys |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Cys | His | Cys | Leu | Pro | Leu | Phe | Ala | His | Lys | Ser | Gly | Ser | | | |
| | | 275 | | | | | 280 | | | | | 285 | | | |

<210> 127

<211> 339

<212> DNA

<213> Homo sapiens

<400> 127

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggatccctca | acgccggtgg | tttcttggtc | ggtgggtgac | tctgagccgt | cggggcagac | 60 |
| gggacagcac | tcgccctcgg | ggacttcggc | gccggggcag | ttcttggtct | cgtcacagat | 120 |
| cacgtcatcg | cacaacacct | tgccgttgtc | gcagacgcag | atccggcagg | gctcgggttt | 180 |
| ccacacgtct | cggtcattgg | acctgaggcc | gttctgtacg | caggtgattg | gtgggatgtc | 240 |
| ttcgtcttgg | ccctcgactt | ggccttcctc | ttggccgtgc | gtcaggaggg | cggtggccgc | 300 |
| taagaggagc | aggagccgga | gtcgacgcgg | ccgcgaatt | | | 339 |

<210> 128

<211> 113

<212> PRT

<213> Homo sapiens

<400> 128

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Leu | Arg | Leu | Leu | Leu | Leu | Leu | Ala | Ala | Thr |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Ala | Leu | Leu | Thr | His | Gly | Gln | Glu | Glu | Gly | Gln | Val | Glu | Gly | Gln | Asp |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Glu | Asp | Ile | Pro | Pro | Ile | Thr | Cys | Val | Gln | Asn | Gly | Leu | Arg | Tyr | His |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Asp | Arg | Asp | Val | Trp | Lys | Pro | Glu | Pro | Cys | Arg | Ile | Cys | Val | Cys | Asp |
| | | 50 | | | | 55 | | | | | 60 | | | | |
| Asn | Gly | Lys | Val | Leu | Cys | Asp | Asp | Val | Ile | Cys | Asp | Glu | Thr | Lys | Asn |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Cys | Pro | Gly | Ala | Glu | Val | Pro | Glu | Gly | Glu | Cys | Cys | Pro | Val | Cys | Pro |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Asp | Gly | Ser | Glu | Ser | Pro | Thr | Asp | Gln | Glu | Thr | Thr | Gly | Val | Glu | Gly |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ser | | | | | | | | | | | | | | | |

<210> 129

<211> 537

<212> DNA

<213> Homo sapiens

<400> 129

| | | | | | | |
|------------|-------------|--------------|--------------|------------|-------------|-----|
| ggatccatag | caggggggctg | ggcgcctgggtt | gggcccacaaag | agatgcaagt | cgccgtattc | 60 |
| ccatagaaac | agctgagtca | tcagggctcc | gaagcccaca | accgccagaa | tgaggaccag | 120 |
| caggaccag | cgggctttct | tttccgcagc | cttccacgcc | tcaatctcat | tcatgggcag | 180 |
| ctcattggcg | ggctcctctg | caggcacctt | cagctcctgg | tacatcagtt | taggcttcat | 240 |
| cttccctcaa | ggctggggga | tacgcagagc | ccaggtgaga | aggtgggtgt | gtcaggggtct | 300 |
| ccaaaccctg | aggggcctcg | gcctcgctct | caggcgtctg | ctgctacctc | cgtctgggccc | 360 |
| cagcttctgt | ctggacaggc | tgaacgaggg | tgggaggagg | gggcggggcc | tgtgggagct | 420 |
| ccgcccactg | cagcggggag | tctgcgcagt | gcgtgcccga | gtccgggctc | accgcagcga | 480 |
| gaagcggggc | tcggctcccc | agacacggtc | gctccaggtc | gacgcggccg | cgaattc | 537 |

<210> 130

<211> 176

<212> PRT

<213> Homo sapiens

<400> 130

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Phe | Ala | Ala | Ala | Ser | Thr | Trp | Ser | Asp | Arg | Val | Trp | Gly | Ala | Glu |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Pro | Arg | Phe | Ser | Leu | Arg | Ala | Arg | Thr | Gly | Ala | Arg | Thr | Ala | Gln | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Pro | Arg | Cys | Ser | Gly | Arg | Ser | Ser | His | Arg | Pro | Arg | Pro | Leu | Leu | Pro |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Pro | Ser | Phe | Ser | Leu | Ser | Arg | Gln | Lys | Leu | Gly | Pro | Ser | Gly | Gly | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Arg | Arg | Leu | Arg | Ala | Arg | Pro | Arg | Pro | Leu | Arg | Val | Trp | Arg | Pro |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| His | Thr | His | Leu | Leu | Thr | Trp | Ala | Leu | Arg | Ile | Pro | Gln | Pro | Gly | Lys |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Met | Lys | Pro | Lys | Leu | Met | Tyr | Gln | Glu | Leu | Lys | Val | Pro | Ala | Glu | Glu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Pro | Ala | Asn | Glu | Leu | Pro | Met | Asn | Glu | Ile | Glu | Ala | Trp | Lys | Ala | Ala |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Glu | Lys | Lys | Ala | Arg | Trp | Val | Leu | Leu | Val | Leu | Ile | Leu | Ala | Val | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Gly | Phe | Gly | Ala | Leu | Met | Thr | Gln | Leu | Phe | Leu | Trp | Glu | Tyr | Gly | Asp |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | His | Leu | Phe | Gly | Pro | Asn | Gln | Arg | Pro | Ala | Pro | Cys | Tyr | Gly | Ser |
| | | | 165 | | | | | | 170 | | | | | 175 | |

<210> 131
 <211> 392
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (9)...(354)
 <223> n = A, C, G or T

<400> 131
 gaattcggnc agtggcccgnc aggaatncgg ncccggggga acctttcctg agattctgcc 60
 ccaggatgcc aactttgant nggatgaana ctacaacttg tncccttctc atctgcatct 120
 ccctgctcca gctgatggtc ccagtgaata ctgatgagac catagagatt atcgtggaga 180
 ataagggtcaa ggaacttctt gccaatccag ctaactatcc ctccactgta acgaanactc 240
 tctcttgacac tagtgtcaag actatgaaca gatgggcctc ctgccctgct gggatgactg 300
 ctactgggtg tgcttgtggc tttgcctgtg gatcttggga gatccagagt gganatactt 360
 gcaactgcct gtgcttactc ctgactggat cc 392

<210> 132
 <211> 130
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (3)...(118)
 <223> Xaa = any amino acid

<400> 132
 Ile Arg Xaa Val Ala Arg Arg Asn Xaa Xaa Pro Gly Glu Pro Phe Leu
 1 5 10 15
 Arg Phe Cys Pro Arg Met Pro Thr Leu Xaa Xaa Met Xaa Thr Thr Thr
 20 25 30

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Xaa | Leu | Leu | Ile | Cys | Ile | Ser | Leu | Leu | Gln | Leu | Met | Val | Pro | Val |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Asn | Thr | Asp | Glu | Thr | Ile | Glu | Ile | Ile | Val | Glu | Asn | Lys | Val | Lys | Glu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Leu | Leu | Ala | Asn | Pro | Ala | Asn | Tyr | Pro | Ser | Thr | Val | Thr | Xaa | Thr | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Cys | Thr | Ser | Val | Lys | Thr | Met | Asn | Arg | Trp | Ala | Ser | Cys | Pro | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Gly | Met | Thr | Ala | Thr | Gly | Cys | Ala | Cys | Gly | Phe | Ala | Cys | Gly | Ser | Trp |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Glu | Ile | Gln | Ser | Gly | Xaa | Thr | Cys | Asn | Cys | Leu | Cys | Leu | Leu | Leu | Thr |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Gly | Ser | | | | | | | | | | | | | | |
| | 130 | | | | | | | | | | | | | | |

<210> 133
 <211> 455
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (409)...(409)
 <223> n = A, C, G or T

<400> 133
 gaattcgcgg cgcgctcgac ggaaagggtca agctgggttcc aaataactaaa atacagatgt 60
 catattcggg aaaatggaaa aaatcggatg taaaatttga agatcgattc gataaatatc 120
 ttgatccatc cttttttcag cataggattc actgggttttc aattttttaat tccttcatga 180
 tgggtgatctt cttagtggga ttagttttcaa tgatttttaat gagaacttta aggaaagatt 240
 atgcccgata cagtaaagaa gaagaaatgg atgacatgga cagagaccta ggagacgagt 300
 atggctggaa gcaggtgcat ggagatgtgt tcagaccgtc aagtcaccct ctgatcttct 360
 cctccctcat tggctctgga tgtcagatat ttgctgtgtc tctcattgnt attattgttg 420
 ccatgataga ggacttatat acagagatgg gatcc 455

<210> 134
 <211> 455
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (409)...(409)
 <223> n = A, C, G or T

<400> 134
 gaattcgcgg cgcgctcgac ggaaagggtca agctgggttcc aaataactaaa atacagatgt 60
 catattcggg aaaatggaaa aaatcggatg taaaatttga agatcgattc gataaatatc 120
 ttgatccatc cttttttcag cataggattc actgggttttc aattttttaat tccttcatga 180

```

tggtgatctt cttagtggga ttagtttcaa tgattttaat gagaacttta aggaaagatt 240
atgcccgata cagtaaagaa gaagaaatgg atgacatgga cagagaccta ggagacgagt 300
atggctggaa gcaggtgcat ggagatgtgt tcagaccgtc aagtcaccct ctgatcttct 360
cctccctcat tggctctgga tgtcagatat ttgctgtgtc tctcattgnt attattgttg 420
ccatgataga ggacttatat acagagatgg gatcc 455

```

<210> 135

<211> 151

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (136)...(136)

<223> Xaa = any amino acid

<400> 135

```

Ile Arg Gly Arg Val Asp Gly Lys Val Lys Leu Val Pro Asn Thr Lys
 1           5           10           15
Ile Gln Met Ser Tyr Ser Val Lys Trp Lys Lys Ser Asp Val Lys Phe
          20           25           30
Glu Asp Arg Phe Asp Lys Tyr Leu Asp Pro Ser Phe Phe Gln His Arg
          35           40           45
Ile His Trp Phe Ser Ile Phe Asn Ser Phe Met Met Val Ile Phe Leu
          50           55           60
Val Gly Leu Val Ser Met Ile Leu Met Arg Thr Leu Arg Lys Asp Tyr
65           70           75           80
Ala Arg Tyr Ser Lys Glu Glu Glu Met Asp Asp Met Asp Arg Asp Leu
          85           90           95
Gly Asp Glu Tyr Gly Trp Lys Gln Val His Gly Asp Val Phe Arg Pro
          100          105          110
Ser Ser His Pro Leu Ile Phe Ser Ser Leu Ile Gly Ser Gly Cys Gln
          115          120          125
Ile Phe Ala Val Ser Leu Ile Xaa Ile Ile Val Ala Met Ile Glu Asp
          130          135          140
Leu Tyr Thr Glu Met Gly Ser
145          150

```

<210> 136

<211> 490

<212> DNA

<213> Mus musculus

<400> 136

```

gaattcgcgg ccgcgtcgac ccaaatccat cactgtcttc tttaaagaga tagaagttat 60
attcagtgca acgaccagtg aagtatcatg gatatcatct ataatggttg ctgtcatgta 120
tgctggagggt cctatcagca gtatcttggg gaataaatac ggcagccgtc cagtaatgat 180
cgctgggtggg tgtctgtctg gttgcggctt gatcgcagct tctttctgta acacagtaca 240
ggaactttac ttgtgcattg gtgttattgg aggtcttggg cttgctttca acttgaaccc 300

```

```

agctctgact atgattggca agtattttcta caagaagcga ccactggcca acggactggc 360
catggcaggc agccctgtgt tcctctctac cctggctcca cttaatcagg ctttctttga 420
tatttttgac tggagaggaa gcttcctaata tcttgggggc ctcctcctaa attgttgtgt 480
agctggatcc                                     490

```

```

<210> 137
<211> 163
<212> PRT
<213> Mus musculus

```

```

<400> 137
Asn Ser Arg Pro Arg Arg Pro Lys Ser Ile Thr Val Phe Phe Lys Glu
 1           5           10           15
Ile Glu Val Ile Phe Ser Ala Thr Thr Ser Glu Val Ser Trp Ile Ser
      20           25           30
Ser Ile Met Leu Ala Val Met Tyr Ala Gly Gly Pro Ile Ser Ser Ile
      35           40           45
Leu Val Asn Lys Tyr Gly Ser Arg Pro Val Met Ile Ala Gly Gly Cys
      50           55           60
Leu Ser Gly Cys Gly Leu Ile Ala Ala Ser Phe Cys Asn Thr Val Gln
      65           70           75           80
Glu Leu Tyr Leu Cys Ile Gly Val Ile Gly Gly Leu Gly Leu Ala Phe
      85           90           95
Asn Leu Asn Pro Ala Leu Thr Met Ile Gly Lys Tyr Phe Tyr Lys Lys
      100          105          110
Arg Pro Leu Ala Asn Gly Leu Ala Met Ala Gly Ser Pro Val Phe Leu
      115          120          125
Ser Thr Leu Ala Pro Leu Asn Gln Ala Phe Phe Asp Ile Phe Asp Trp
      130          135          140
Arg Gly Ser Phe Leu Ile Leu Gly Gly Leu Leu Leu Asn Cys Cys Val
      145          150          155          160
Ala Gly Ser

```

```

<210> 138
<211> 358
<212> DNA
<213> Mus musculus

```

```

<220>
<221> unsure
<222> (18)...(18)
<223> n = A, C, G or T

```

```

<400> 138
gaattcgcg cgcgtttnga cgcggcgggc gcggccgagc tggatgatcg ctggtgcac 60
ttcggcctct tgctcctggc tattttggcc ttttgctggg tctacgttcg gaagtaccag 120
agtcagcggg aaagtgaggt cgtctccact gtgacagcca ttttttcaact ggctgttgct 180
ctgatcacat cagcactgct gccggtggat atatttttgg tttcttacat gaaaaatcaa 240

```

aatggcacat tcaaggactg ggctgacgcc aatgtcaccg tacagattga gaataccggt 300
ctgtatggct actatactct gtattctgtc attctcttct gtgtgttctt ctggatcc 358

<210> 139

<211> 356

<212> DNA

<213> Mus musculus

<400> 139

gaattcgcgg ccgcgtcgac gttttttgtt ttttgttttt gtgtttgttt ttgttttttt 60
gagccagggc aatacagaaa aaaaacaaac aaacaaacaa aatgtagtgt aaagtggcct 120
gtggttctgc tgtaaagac aggttctttc atatttctca gtctagaagt cagcagtgt 180
attgtgataa tttcatattt ggaaacctaa gtgaaacttg gtgcatgata tttattcttc 240
aaaatgcagg taagctgatg gccatatctg tctggatatg gtttgttctt tagactgagc 300
ctctgtgggt tgctaactgg gtacatgttt tattgacagc aatatgttta ggatcc 356

<210> 140

<211> 115

<212> PRT

<213> Mus musculus

<400> 140

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Arg | Gly | Arg | Val | Asp | Val | Phe | Cys | Phe | Leu | Phe | Leu | Cys | Leu | Phe |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Leu | Phe | Phe | Ala | Arg | Ala | Ile | Gln | Lys | Lys | Asn | Lys | Gln | Thr | Asn | Lys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Met | Cys | Lys | Val | Ala | Cys | Gly | Ser | Ala | Val | Lys | Asp | Arg | Phe | Phe | His |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ile | Ser | Gln | Ser | Arg | Ser | Gln | Gln | Cys | Asn | Cys | Asp | Asn | Phe | Ile | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Asn | Leu | Ser | Glu | Thr | Trp | Cys | Met | Ile | Phe | Ile | Leu | Gln | Asn | Ala |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Gly | Lys | Leu | Met | Ala | Ile | Ser | Val | Trp | Ile | Trp | Phe | Val | Leu | Thr | Glu |
| | | | 85 | | | | | 90 | | | | | | 95 | |
| Pro | Leu | Trp | Phe | Ala | Asn | Trp | Val | His | Val | Leu | Leu | Thr | Ala | Ile | Cys |
| | | | 100 | | | | | 105 | | | | | | 110 | |
| Leu | Gly | Ser | | | | | | | | | | | | | |
| | | 115 | | | | | | | | | | | | | |

<210> 141

<211> 300

<212> DNA

<213> Mus musculus

<400> 141

gaattcgcgg ccgcgtcgac ggacacttaa gagaagtata ttaaactctga tcttgctatg 60
tatcttttta aatatagta ttaacatact aatataatgc taattgaaaa attaaagtac 120
atattattgt gtacatgtgt gtgcatatac gcgtgtgccg tgggtgtgcgt gtggagagca 180
ggggacagct tgccatagct ggctctctac tgccatgaca tgggtcttag ggatcgagtt 240

catgccacta ggcttcatgt tacgggtctt cctggccctg taaatatttt gaagggatcc 300

<210> 142
<211> 96
<212> PRT
<213> Mus musculus

<400> 142
Glu Phe Ala Ala Ala Ser Thr Asp Thr Glu Lys Tyr Ile Lys Ser Asp
1 5 10 15
Leu Ala Met Tyr Leu Phe Lys Ile Tyr His Thr Asn Ile Met Leu Ile
20 25 30
Glu Lys Leu Lys Tyr Ile Tyr Leu Cys Thr Cys Val Cys Ile Tyr Ala
35 40 45
Cys Ala Met Val Cys Val Trp Arg Ala Gly Asp Ser Leu Pro Leu Ala
50 55 60
Leu Tyr Cys His Asp Met Gly Leu Arg Asp Arg Val His Ala Thr Arg
65 70 75 80
Leu His Val Thr Gly Leu Pro Gly Pro Val Asn Ile Leu Lys Gly Ser
85 90 95

<210> 143
<211> 897
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (580)...(896)
<223> n = A, C, G or T

<400> 143
gaattcgcgg ccgcgtcgac ggacttttgg tctctagggt gacatttcct tcccattgcc 60
atgtaggggt cagtgatgtg cagtcgcttg tggacttaac taagtttaaa ttaaaaaaat 120
gatttttttt gtttttttta attaaaagac attattttgt gtgagggggg agaagagtg 180
tgaggttaga gcccataaga tactaaacta gaagtcttgt ttataatagg ttgacactgg 240
caagttgtta atctctcagt ggtagtcttt ctatctctaa agtggtataa gtattgatgc 300
ttgtgttgag agtatttgct aggattagaa atcattggaa ataatgaatc aagataaaaa 360
atggcactgg aggtaggaag ctgagggcat agaatgtcac gggtctggga agttagttgg 420
aagctgagaa gttggtgata ttctggattt gctataactg attttatctg cccatctctt 480
gattgacact ggcatacttg gcatatagac ttccaagaaa agatgtagc tattatggaa 540
ggagcattgt gtagagaccc tggagaaagg ggtagctctn caagtaggtt ctcaattaac 600
ataggtagag cggcgggtga cggccactgt gaactctttc ctatctactt attggtcctt 660
tagctctcac ctcaacttcta ccttccttaa cccgagcacc caggagtctg ntcttcaact 720
cttgagagaa gtaaaagatg gcttatgaaa antttantag ctgcacatag gaatgaaggt 780
gtgggctntg gaccngatga tgganattga atccctggcc ttactactat gggatttngg 840
taattaaatg gcttggaac tgaaataatt ggggggtatg aggatanttt ganannt 897

<210> 144
 <211> 357
 <212> DNA
 <213> Mus musculus

<400> 144
 gaattcgcgg ccgcgtcgac gcggcggcgg cggccgagct ggtgatcggc tgggtgcatct 60
 tcggcctctt gctcctggct attttggcct tttgctgggt ctacgttcgg aagtaccaga 120
 gtcagcggga aagtgaggtc gtctccactg tgacagccat tttttcactg gctgttgctc 180
 tgatcacatc agcactgctg ccggtggata tatttttggt ttcttacatg aaaaatcaaa 240
 atggcacatt caaggactgg gctgacgcca atgtcacctg acagattgag aataccgttc 300
 tgtatggcta ctatactctg tattctgtca ttctcttctg tgtgttcttc tggatcc 357

<210> 145
 <211> 115
 <212> PRT
 <213> Mus musculus

<400> 145
 Glu Phe Ala Ala Ala Ser Thr Arg Arg Arg Arg Pro Ser Trp Ser Ala
 1 5 10 15
 Gly Ala Ser Ser Ala Ser Cys Ser Trp Leu Phe Trp Pro Phe Ala Gly
 20 25 30
 Ser Thr Phe Gly Ser Thr Arg Val Ser Gly Lys Val Arg Ser Ser Pro
 35 40 45
 Leu Gln Pro Phe Phe His Trp Leu Leu Leu Ser His Gln His Cys Cys
 50 55 60
 Arg Trp Ile Tyr Phe Trp Phe Leu Thr Lys Ile Lys Met Ala His Ser
 65 70 75 80
 Arg Thr Gly Leu Thr Pro Met Ser Pro Tyr Arg Leu Arg Ile Pro Phe
 85 90 95
 Cys Met Ala Thr Ile Leu Cys Ile Leu Ser Phe Ser Ser Val Cys Ser
 100 105 110
 Ser Gly Ser
 115

<210> 146
 <211> 346
 <212> DNA
 <213> Mus musculus

<400> 146
 gaattcgcgg ccgcgtcgac ctataatctg tctacctatc taaccaccat acatctatct 60
 catctatata ttcacttata cacctattta agtatctatt gacctatgta gctactatgt 120
 atctacccat gtgtctacct gtgtgtctat ttatcacata tctgtctgtc tgtctgtcta 180
 tcatttgcct atctacttat ttacttagga aacaaacatg gagatgtttt tgttcaagtg 240
 caaggatttt ataaaagcat ctataaaaat ctgtgtcatg gtctttgtcc tcattgatat 300
 aggactgttt agtaccagca cctgctatac tctagccact ggatcc 346

<210> 147
 <211> 112
 <212> PRT
 <213> Mus musculus

<400> 147
 Asn Ser Arg Pro Arg Arg Pro Ile Ile Cys Leu Pro Ile Pro Pro Tyr
 1 5 10 15
 Ile Tyr Leu Ile Tyr Ile Phe Ile Tyr Thr Pro Ile Val Ser Ile Asp
 20 25 30
 Leu Cys Ser Tyr Tyr Val Ser Thr His Val Ser Thr Cys Val Ser Ile
 35 40 45
 Tyr His Ile Ser Val Cys Leu Ser Val Tyr His Leu Pro Ile Tyr Leu
 50 55 60
 Phe Thr Glu Thr Asn Met Glu Met Phe Leu Phe Lys Cys Lys Asp Phe
 65 70 75 80
 Ile Lys Ala Ser Ile Lys Ile Cys Val Met Val Phe Val Leu Ile Asp
 85 90 95
 Ile Gly Leu Phe Ser Thr Ser Thr Cys Tyr Thr Leu Ala Thr Gly Ser
 100 105 110

<210> 148
 <211> 962
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (672)...(961)
 <223> n = A, C, G or T

<400> 148
 gaattcgcgg ccgcgtcgac gtagactggt tggcttggtt caaggattca gcaaattctct 60
 gcaagttagt gctttgcatg gtgcctggcc catggtaaata aaatgtcctg gcaagttaaa 120
 gtcttcagag ctctatatata atttgaaccc agaactccag atgaattata ctttgaagaa 180
 ggagacatta tctacatcac tgacatgagt gataccagct ggtggaaagg gacatgcaag 240
 ggcagaacag gactgatccc gagcaactat gtggctgagc aggcagaatc cattgacaat 300
 ccattgcatg aagctgcaaa aagaggcaac ctgagctggt tgaggggagt cttggacaac 360
 cgggtgggtg tgaacggcct ggacaaagct ggaagcacag ccctgtactg ggcctgccac 420
 ggtggccata aagacatagt ggaggttctg ttactcagc ccgaatgtgg agctgaacca 480
 gcagaataag ctgggagaca cagctctgca cgcggctgcc tggagggtt atgcagacat 540
 tgtccagttg ctactggcaa aaggtgagag gacagacttg agaaacaatg agaagaagct 600
 gccttggaaca tggccaccaa cgctgcctgt gcatcgcttc tgaagaagaa gcagcaggga 660
 acagatgggg cntcgaacgt taagcaacgc ccgaaggact tancctcgat gaccaaagac 720
 ntcagactgg attccccccg ggggccggtt ttgaatggtt ggcctaaact ttcttttngc 780
 ttttngncaa tttccgggaa ccctnggggtt ggnttngncc cnaaaaaagt nnttggataa 840
 ccnggtggcn tttttaaaag gtctgggatt gaaaccccgaa anacttggtt ggcacttggg 900
 ggattcccaa ccccgaaaaa acccttggtg naaaggtaaa aagnnagnct tgaaaaatcc 960
 nt 962

<210> 149
<211> 296
<212> DNA
<213> Mus musculus

<400> 149
gaattcgcgg cccgcgtcga cttttttttt tttttgactg tcctaaattg tttattggat 60
atgaatttta caaatatcac gtgtattagc ggtaacgggtg gagctggaga gtattgcgcc 120
ttctccaggc tgcacggcgg gaaccaccaa tagtgtgggtg gaacttgtgg ccctttccaa 180
ggccacggct ctttcggcca gcagatgtca gccacgcat ctctctgtgt ttgtggactg 240
gtttggtgat ccactgggtg tcaggatttc ttctgatagc tttatggaac ggatcc 296

<210> 150
<211> 67
<212> PRT
<213> Mus musculus

<400> 150
Arg Trp Ser Trp Arg Val Leu Arg Leu Leu Gln Ala Ala Arg Arg Glu
1 5 10 15
Pro Pro Ile Val Trp Trp Asn Leu Trp Pro Phe Pro Arg Pro Arg Leu
20 25 30
Phe Arg Pro Ala Asp Val Ser Pro Arg Ile Ser Leu Cys Leu Trp Thr
35 40 45
Gly Leu Val Ile His Trp Val Ser Gly Phe Leu Leu Ile Ala Leu Trp
50 55 60
Asn Gly Ser
65

<210> 151
<211> 356
<212> DNA
<213> Mus musculus

<400> 151
gaattcgcgg cccgcgtcga gttttttggt ttttgttttt gtgtttggtt ttgttttttt 60
gagccagggc aatacagaaa aaaaacaaac aaacaaacaa aatgtagtgt aaagtggcct 120
gtggttctgc tgttaaagac aggttctttc atatttctca gtctagaagt cagcagtgta 180
attgtgataa tttcatattt ggaaacctaa gtgaaacttg gtgcatgata tttattcttc 240
aaaatgcagg taagctgatg gccatatctg tctggatatg gtttgttctt tagactgagc 300
ctctgtgggt tgctaactgg gtacatgttt tattgacagc aatatgttta ggatcc 356

<210> 152
<211> 669
<212> DNA
<213> Mus musculus

<400> 152

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gaattcgcgg cccgcgtcga cctctctgtg aggagtgcag aaacatagtg ttcaaaatgc 60
ctgctgaaat gcaagcccct cagtggctcc tgctgctact gggtatcctg ccagccacag 120
gctcagaccc tgtgctctgc ttcacccagt atgaggagtc ctctggcagg tgcaaaggcc 180
tacttgggag agacatcagg gtagaagact gctgtctcaa cgctgcctat gccttcagg 240
agcatgatgg tggcctctgt caggcatgca ggtctccaca atggtcagca tggtccttat 300
gggggccctg ctcagttaca tgttctgagg ggtcccagct ggcacacagg cgctgtgtgg 360
gcagaggtgg tcagtgtctt gagaatgtgg ctcttgggaac tcttgagtgg cagctacagg 420
cctgtgagga ccagccatgc tgtccagaga tgggtggctg gtctgagtgg ggaccctggg 480
ggccttgctc tgtcacatgc tccaaaggaa cccagatccg tcaacgagta tgtgataatc 540
ctgctcctaa gtgtgggggc cactgcccag gaagaggccc agcaatcaca ggccttgatg 600
caccagaag acctgcccca cacatgggcc tgggcattct ggggccctg gagcccttgt 660
tcaggatcc 669

```

<210> 153

<211> 220

<212> PRT

<213> Mus musculus

<400> 153

```

Glu Phe Ala Ala Arg Val Asp Leu Ser Val Arg Ser Ala Glu Thr Cys
 1          5          10          15
Ser Lys Cys Leu Leu Lys Cys Lys Pro Leu Ser Gly Ser Cys Cys Tyr
          20          25          30
Trp Leu Ser Cys Gln Pro Gln Ala Gln Thr Leu Cys Ser Ala Ser Pro
          35          40          45
Ser Met Arg Ser Pro Leu Ala Gly Ala Lys Ala Tyr Leu Gly Glu Thr
          50          55          60
Ser Gly Lys Thr Ala Val Ser Thr Leu Pro Met Pro Ser Arg Ser Met
65          70          75          80
Met Val Ala Ser Val Arg His Ala Gly Leu His Asn Gly Gln His Gly
          85          90          95
Pro Tyr Gly Gly Pro Ala Gln Leu His Val Leu Arg Gly Pro Ser Cys
          100          105          110
Asp Thr Gly Ala Val Trp Ala Glu Val Val Ser Ala Leu Arg Met Trp
          115          120          125
Leu Leu Glu Leu Leu Ser Gly Ser Tyr Arg Pro Val Arg Thr Ser His
          130          135          140
Ala Val Gln Arg Trp Val Ala Gly Leu Ser Gly Asp Pro Gly Gly Leu
145          150          155          160
Ala Leu Ser His Ala Pro Lys Glu Pro Arg Ser Val Asn Glu Tyr Val
          165          170          175
Ile Ile Leu Leu Leu Ser Val Gly Ala Thr Ala Gln Glu Glu Ala Gln
          180          185          190
Gln Ser Gln Ala Leu His Pro Glu Asp Leu Pro His Thr Trp Ala Trp
          195          200          205
Ala Ser Trp Gly Pro Trp Ser Pro Cys Ser Gly Ser
          210          215          220

```

<210> 154

<211> 179
<212> DNA
<213> Mus musculus

<400> 154
gaattcgggc cgcggggcac ttcctcttgt ggaatgttta aaaagtttagc ctactaaaga 60
aaacagtcga cttcttgtga aggttttgga gaaatatgta tcagttcgtt ttatttgggt 120
attcaataat atccttggtg ataatgctga ctccatggct tctgatccca caaggatcc 179

<210> 155
<211> 33
<212> PRT
<213> Mus musculus

<400> 155
Arg Phe Trp Arg Asn Met Tyr Gln Phe Val Leu Phe Gly Tyr Ser Ile
1 5 10 15
Ile Ser Leu Val Ile Met Leu Thr Pro Trp Leu Leu Ile Pro Gln Gly
20 25 30
Ser

<210> 156
<211> 889
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (1)...(203)
<223> n = A, C, G or T

<400> 156
ngggggggcgcg ttccggncan angttggctc ccgttatatt gtnaaaactt gcgggcgaatg 60
gcttgccggt cctcgnngctt acggatngcc gttcccgatt gcaggggctng ccttcatngc 120
ntcctgcgag tcttctgatt gaaaaggaag agtaagctga tttcccatgg ccaagnccac 180
ttctgtacct ggggtggctt ccntgggttc ctgctgtcca ggcatttctg cttccagcaa 240
ggcagcccaa aggcaggtat gtcaagtggg atgccagagt cctcggtgga agagtgactt 300
gtcctagcct cctcctcctc ttgctgctca gcctagtggg ccagctagca aggaagtcca 360
ttgctgcttc tctctgacgc agacaccacc cactgtctgg agtgaagccg cctgcctttt 420
cttcctagag cactggttct caacaccctt tgggctgcct atatccgata tcttgcatat 480
ccaatatatta catgacgatt cacaacaggc gcaaaattac aggtatgaag tagcaacaaa 540
ataacttttag gggtggggat caccacgaca tgaggaacca tgtaaagag tctcagcgat 600
aggcaggttg agaggcgcca tcttagagct atgaccagtc agcgagggcc ttgcatacct 660
ccccgcaaaa ggaagctcag ctccaggagt ggaatattca aagaatttg ccttttgagt 720
agtttagctt atcctgccat tagcagaaaa tattgactgg aggggtggat tcattctaca 780
tgttttaatt ttgaaaagta tctgtattgt gagcatatgt gtgtatcttt ggatgatttg 840
tgcgtatgat tgctggtgcc cacagagacc agcagagggc aatggatcc 889

<210> 157
<211> 54
<212> PRT
<213> Mus musculus

<400> 157
Leu Ile Leu Pro Leu Ala Glu Asn Ile Asp Trp Arg Gly Gly Phe Ile
1 5 10 15
Leu His Val Leu Ile Leu Lys Ser Ile Cys Ile Val Ser Ile Cys Val
20 25 30
Tyr Leu Trp Met Ile Cys Ala Tyr Asp Cys Trp Cys Pro Gln Arg Pro
35 40 45
Ala Glu Gly Asn Gly Ser
50

<210> 158
<211> 179
<212> DNA
<213> Mus musculus

<400> 158
gaattcaaaa aggaagagta agcttgaatt cgggacagcg gggagtcttg aggcgcaatg 60
gatggttttg cttttatttg tgtttgataa ccatagtcgg ttatggcgac tgctatggag 120
atgtaggcaa ggcagcctcc tgtgtgacat tcactgtaaa ccctggagat gctggatcc 179

<210> 159
<211> 59
<212> PRT
<213> Mus musculus

<400> 159
Ile Gln Lys Gly Arg Val Ser Leu Asn Ser Gly Gln Arg Gly Val Leu
1 5 10 15
Arg Arg Asn Gly Trp Phe Cys Phe Tyr Leu Cys Leu Ile Thr Ile Val
20 25 30
Gly Tyr Gly Asp Cys Tyr Gly Asp Val Gly Lys Ala Ala Ser Cys Val
35 40 45
Thr Phe Thr Val Asn Pro Gly Asp Ala Gly Ser
50 55

<210> 160
<211> 215
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (7)...(37)

<223> n = A, C, G or T

<400> 160

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tgcttcncnc caagctttcc aggtgagaga taagggncac tcttgagtc aactttcacg 60
ggctcttgatt taaaaaggaa tcacaggtcc catatccatt acttttccta ttgttgagaa 120
caattttttt tcttttgaag atttatttat ttattttatg tgtatgcata cactatagct 180
atcttcagac tcaccagaag agggcacttg gatcc 215
```

<210> 161

<211> 69

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (2)...(11)

<223> Xaa = any amino acid

<400> 161

```
Leu Xaa Xaa Lys Leu Ser Arg Glu Ile Arg Xaa Thr Leu Gly Val Asn
 1          5          10          15
Phe His Gly Ser Phe Lys Lys Glu Ser Gln Val Pro Tyr Pro Leu Leu
 20          25          30
Phe Leu Leu Leu Arg Thr Ile Phe Phe Leu Leu Lys Ile Tyr Leu Phe
 35          40          45
Ile Leu Cys Val Cys Ile His Tyr Ser Tyr Leu Gln Thr His Gln Lys
 50          55          60
Arg Ala Leu Gly Ser
65
```

<210> 162

<211> 110

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (21)...(21)

<223> n = A, C, G or T

<400> 162

```
aggagcccag gagaatctga ncaatgagga aaaagatcat aaccatattt aagacattaa 60
acaaacaaat aattgtcttt atgcaaatag taacatcgcc agctggatcc 110
```

<210> 163

<211> 34

<212> PRT

<213> Mus musculus

<220>
 <221> UNSURE
 <222> (28)...(28)
 <223> Xaa = any amino acid

<400> 163
 Ala Gly Asp Val Thr Ile Cys Ile Lys Thr Ile Ile Cys Leu Phe Asn
 1 5 10 15
 Val Leu Asn Met Val Met Ile Phe Phe Leu Ile Xaa Gln Ile Leu Leu
 20 25 30
 Gly Ser

<210> 164
 <211> 311
 <212> DNA
 <213> Mus musculus

<400> 164
 gaattcaggc cgcgggggtt catgtaagtg aaggtggagt agagccctga gccctggccg 60
 gctgcgtgac ttagtagga gccggagttc tgatggtcag ctagtcgta ttgcgagcgg 120
 gtgatgggcg ggtaggagg gctgtagtga ggaagggtga aggggctgta ggagatctgt 180
 tgcggggagt gctgctgctg ctcgctgtag tggctggggc tcagctgctc cgtcttgatg 240
 tgcgttcgct gggactggcc tggctcgctg ctcagcgtgg tgagcgtgtg tgccctgctac 300
 tgtcaggatc c 311

<210> 165
 <211> 102
 <212> PRT
 <213> Mus musculus

<400> 165
 Ile Gln Ala Arg Gly Val His Val Ser Glu Gly Gly Val Glu Pro Ala
 1 5 10 15
 Leu Ala Gly Cys Val Thr Val Val Gly Ala Gly Val Leu Met Val Ser
 20 25 30
 Val Val Val Leu Arg Ala Gly Asp Gly Arg Val Gly Gly Ala Val Val
 35 40 45
 Arg Lys Val Glu Gly Ala Val Gly Asp Leu Leu Arg Gly Val Leu Leu
 50 55 60
 Leu Leu Ala Val Val Ala Gly Ala Gln Leu Leu Arg Leu Asp Val Arg
 65 70 75 80
 Ser Leu Gly Leu Ala Trp Leu Ala Ala Gln Arg Gly Glu Arg Val Cys
 85 90 95
 Leu Leu Leu Ser Gly Ser
 100

<210> 166

<211> 113
<212> PRT
<213> Mus musculus

<220>
<221> UNSURE
<222> (1)...(24)
<223> Xaa = any amino acid

<400> 166
Xaa Val Ser Xaa Asn Ser Gly Xaa Xaa Arg Gly Val Xaa Leu Gly Leu
1 5 10 15
Arg Ser Val Ala Xaa Gly Phe Xaa Asp Thr Glu Val Thr Thr Pro Met
20 25 30
Gly Thr Ala Glu Val Ala Pro Asp Thr Ser Pro Arg Ser Gly Pro Ser
35 40 45
Cys Trp His Arg Leu Val Gln Val Phe Gln Ser Lys Gln Phe Arg Ser
50 55 60
Ala Lys Leu Glu Arg Leu Tyr Gln Arg Tyr Phe Phe Gln Met Asn Gln
65 70 75 80
Ser Ser Leu Thr Leu Leu Met Ala Val Leu Val Leu Leu Met Ala Val
85 90 95
Leu Leu Thr Phe His Ala Ala Pro Ala Gln Pro Gln Pro Ala Tyr Gly
100 105 110
Ser

<210> 167
<211> 248
<212> DNA
<213> Mus musculus

<400> 167
acatctctcg gaggaccatg ggctctggcg ggaagagagc cttcgagagg cggtagagat 60
tgcggaagggt gaactggatg ctggtgttgg tgacgcgaag ctcgtggatg ttggtggagc 120
tgtcctgagg gcagatgtca ctctgcctg agaatgggga cactgtgatg gtattcttca 180
gctcataaag tggcaagttg tctgaaatgc cgccatccac atagcgcacc ccttagaggc 240
taggatcc 248

<210> 168
<211> 107
<212> PRT
<213> Mus musculus

<220>
<221> UNSURE
<222> (2)...(30)
<223> Xaa = any amino acid

<400> 168

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Xaa | Xaa | Gly | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Gly | Xaa | Xaa | Ser | Xaa | Xaa |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Ser | Xaa | Xaa | Leu | Xaa | Cys | Xaa | Xaa | Ile | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Arg | Arg | Thr | Met | Gly | Ser | Gly | Gly | Lys | Arg | Ala | Phe | Glu | Arg | Arg | Arg |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Leu | Arg | Arg | Leu | Asn | Trp | Met | Leu | Val | Leu | Val | Thr | Arg | Ser | Ser | Trp |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Met | Leu | Val | Glu | Leu | Ser | Gly | Gln | Met | Ser | Leu | Ser | Pro | Glu | Asn | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Asp | Thr | Val | Met | Val | Phe | Phe | Ser | Ser | Ser | Gly | Lys | Leu | Ser | Glu | Met |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Pro | Pro | Ser | Thr | Arg | Thr | Pro | Arg | Leu | Gly | Ser | | | | | |
| | | | 100 | | | | | 105 | | | | | | | |

<210> 169

<211> 420

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (46)...(63)

<223> n = A, C, G or T

<400> 169

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gaattcgcgg | cgcgctcgac | cttttttttt | tttttttttt | ttttnttttt | ttttttntn | 60 |
| nnnggatttt | tccaagataa | aactttattg | gagacagcaa | ggagtatact | gaaagtggg | 120 |
| gagccatgcc | ttcattccat | aactgcaatc | agatgctctc | ctctgagaga | gagtgtgtgg | 180 |
| ggagccaagg | tgagaagcag | gtatgattca | caccccaact | gcttggagag | tgcttatatg | 240 |
| acagtctttt | tctcgatttt | attttttctc | agttcttcaa | cacacacttt | ggcttcattt | 300 |
| gggggaaaat | taaacaaaag | aacagaattt | ccctcccca | gagttactta | tgaaatgaca | 360 |
| cagctgcct | tttctttgaa | gggattcttg | tcttctggga | ttccctttac | cagaggatcc | 420 |

<210> 170

<211> 140

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (16)...(21)

<223> Xaa = any amino acid

<400> 170

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Phe | Ala | Ala | Ala | Ser | Thr | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Xaa |
| 1 | | | | 5 | | | | 10 | | | | | 15 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Phe | Phe | Xaa | Xaa | Gly | Phe | Phe | Gln | Asp | Lys | Thr | Leu | Leu | Glu | Thr |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ala | Arg | Ser | Ile | Leu | Lys | Val | Gly | Glu | Pro | Cys | Leu | His | Ser | Ile | Thr |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ala | Ile | Arg | Cys | Ser | Pro | Leu | Arg | Glu | Ser | Val | Trp | Gly | Ala | Lys | Val |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Arg | Ser | Arg | Tyr | Asp | Ser | His | Pro | Asn | Cys | Leu | Glu | Ser | Ala | Tyr | Met |
| 65 | | | | | 70 | | | | 75 | | | | | | 80 |
| Thr | Val | Phe | Phe | Ser | Ile | Leu | Phe | Phe | Leu | Ser | Ser | Ser | Thr | His | Thr |
| | | | | 85 | | | | 90 | | | | | | 95 | |
| Leu | Ala | Ser | Phe | Gly | Gly | Lys | Leu | Asn | Lys | Arg | Thr | Glu | Phe | Pro | Ser |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Pro | Arg | Val | Thr | Tyr | Glu | Met | Thr | Gln | Leu | Pro | Phe | Ser | Leu | Lys | Gly |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Phe | Leu | Ser | Ser | Gly | Ile | Pro | Phe | Thr | Arg | Gly | Ser | | | | |
| | 130 | | | | | 135 | | | | | 140 | | | | |

<210> 171
 <211> 334
 <212> DNA
 <213> Mus musculus

<400> 171
 gaattcgcg cgcgctcgac ggcggtccg gaggtgctgg agtcagacgt gtcaagtctcg 60
 ataacacttt tgaaaaacct ccaggagcag gtgagtatgt atgtctttta gaataaatca 120
 gtcaggggtt aactttgact ttgtaagtct catccacaca ctttgatgat tcgaataacta 180
 caaaattatc ttaggtgtaa aataaaagcc ttatatgcgc ttcattgaaag ttcaaaataa 240
 ttcattcagc tcccaaagaa atacagaaag ctgtttttcc cccattcact tacttattta 300
 tttattttat ttagtcactt tacattccgg atcc 334

<210> 172
 <211> 105
 <212> PRT
 <213> Mus musculus

<400> 172
 Asn Ser Arg Pro Arg Arg Arg Arg Leu Arg Arg Cys Trp Ser Gln Thr
 1 5 10 15
 Cys Gln Val Arg His Phe Lys Thr Ser Arg Ser Arg Val Cys Met Ser
 20 25 30
 Phe Arg Ile Asn Gln Ser Gly Val Asn Phe Asp Phe Val Ser Leu Ile
 35 40 45
 His Thr Leu Phe Glu Tyr Tyr Lys Ile Ile Leu Gly Val Lys Lys Pro
 50 55 60
 Tyr Met Arg Phe Met Lys Val Gln Asn Asn Ser Phe Ser Ser Gln Arg
 65 70 75 80
 Asn Thr Glu Ser Cys Phe Ser Pro Ile His Leu Leu Ile Tyr Leu Phe
 85 90 95
 Tyr Leu Val Thr Leu His Ser Gly Ser

<210> 173
 <211> 648
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (11)...(43)
 <223> n = A, C, G or T

<400> 173
 tccacagtac ntgcctntaga agccttggac ctgccngtcc tcntaggcca cttcaggctc 60
 agatgctacc aatgttgtct ccttgaacag agtctgagcc ccctgccagc tccttcttcc 120
 atttcctagg agcatttgtg gtgtgccagt ggatggctgg ctgacgtgtg gatagactga 180
 tgggtgtgtgt ctagatgggtg gtggtgggta tatggatgat ggatggatgg gtgggtgggt 240
 gaatggatga atggatgagt ggggtgtagg tatgtaattg ggtaaattgat ggatagatac 300
 atatttaggg agaaatcttt ttctagagag tttgttttaa aactagccaa gcttaggtgg 360
 caaccggaac aaagatgggtc ccaagtgtag ggaggggtct gatgccttcc acgtggtttt 420
 agctcttatt ttatgattga ttgttcagta attcctgcat taaccaagtg gagactgact 480
 ttggaacaat ctaagtggat tatttttagcg ggcttccctt tggctgggggt catgctggct 540
 caggtgtgga ttaaccacag tcacttcctc tcagccttgc tggactgtgg tggacgggat 600
 cttagcaggg tgaagcgcagc ccagatgatg agagaggcga ggggatcc 648

<210> 174
 <211> 208
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (4)...(15)
 <223> Xaa = any amino acid

<400> 174
 Ser Thr Val Xaa Ala Xaa Glu Ala Leu Asp Leu Pro Val Leu Xaa Gly
 1 5 10 15
 His Phe Arg Leu Arg Cys Tyr Gln Cys Cys Leu Leu Glu Gln Ser Leu
 20 25 30
 Ser Pro Leu Pro Ala Pro Ser Ser Ile Ser Glu His Cys Gly Cys Ala
 35 40 45
 Ser Gly Trp Leu Ala Asp Val Trp Ile Asp Trp Cys Val Ser Arg Trp
 50 55 60
 Trp Trp Trp Val Tyr Gly Trp Met Asp Gly Trp Val Gly Glu Trp Met
 65 70 75 80
 Asn Gly Val Gly Gly Arg Tyr Val Ile Gly Met Met Asp Arg Tyr Ile
 85 90 95
 Phe Arg Glu Lys Ser Phe Ser Arg Glu Phe Val Lys Leu Ala Lys Leu

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | 100 | | | | | 105 | | | | 110 | | | |
| Arg | Trp | Gln | Pro | Glu | Gln | Arg | Trp | Ser | Gln | Val | Gly | Gly | Val | Cys | Leu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Arg | Gly | Phe | Ser | Ser | Tyr | Phe | Met | Ile | Asp | Cys | Ser | Val | Ile | Pro |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ala | Leu | Thr | Lys | Trp | Arg | Leu | Thr | Leu | Glu | Gln | Ser | Lys | Trp | Ile | Ile |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Ala | Gly | Phe | Pro | Leu | Ala | Gly | Val | Met | Leu | Ala | Gln | Val | Trp | Ile |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Asn | His | Ser | His | Phe | Leu | Ser | Ala | Leu | Leu | Asp | Cys | Gly | Gly | Arg | Asp |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Ser | Arg | Val | Lys | Ala | Ala | Gln | Met | Met | Arg | Glu | Ala | Arg | Gly | Ser |
| | | 195 | | | | | 200 | | | | | 205 | | | |

<210> 175

<211> 619

<212> DNA

<213> Mus musculus

<400> 175

| | | | | | | |
|-------------|------------|-------------|-------------|------------|------------|-----|
| gaagtgaaag | ttcgtccaag | gcagcacaac | tgcacttgtg | tggtataaca | gccagatcac | 60 |
| agctccctat | gcggaccgag | tcaccttctc | atccagtggc | atcacgttca | gttctgtgac | 120 |
| ccggaaggac | aatggagagt | atacttgcac | ggctctccgag | gaaggtggcc | agaactacgg | 180 |
| ggaggtcagc | atccacctca | ctgtgcttgt | acctccatcc | aagccgacga | tcagtgtccc | 240 |
| ctcctctgtc | accattggga | acagggcagt | gctgacctgc | tcagagcatg | atggttcccc | 300 |
| accctctgaa | tattcctggt | tcaaggacgg | gatatccatg | cttacagcag | atgccaagaa | 360 |
| aaccgaggcc | ttcatgaatt | cttcattcac | cattgatcca | aagtcggggg | atctgatctt | 420 |
| tgaccccggtg | acagcctttg | atagtgggtga | atactactgc | caggcccaga | atggatatgg | 480 |
| gacagccatg | aggtcagagg | ctgcacacat | ggatgctgtg | gagctgaatg | tggggggcat | 540 |
| cgtggcagct | gtcctggtaa | caactgattct | ccttggaactc | ttgatttttg | gcgtctgggt | 600 |
| tgcttatagc | cacgcatcc | | | | | 619 |

<210> 176

<211> 205

<212> PRT

<213> Mus musculus

<400> 176

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Phe | Val | Gln | Gly | Ser | Thr | Thr | Ala | Leu | Val | Cys | Tyr | Asn | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Gln | Ile | Thr | Ala | Pro | Tyr | Ala | Asp | Arg | Val | Thr | Phe | Ser | Ser | Ser | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ile | Thr | Phe | Ser | Ser | Val | Thr | Arg | Lys | Asp | Asn | Gly | Glu | Tyr | Thr | Cys |
| | | 35 | | | | | 40 | | | | 45 | | | | |
| Met | Val | Ser | Glu | Glu | Gly | Gly | Gln | Asn | Tyr | Gly | Glu | Val | Ser | Ile | His |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Leu | Thr | Val | Leu | Val | Pro | Pro | Ser | Lys | Pro | Thr | Ile | Ser | Val | Pro | Ser |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Val | Thr | Ile | Gly | Asn | Arg | Ala | Val | Leu | Thr | Cys | Ser | Glu | His | Asp |

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | | 85 | | | | | 90 | | | | | 95 | | | |
| Gly | Ser | Pro | Pro | Ser | Glu | Tyr | Ser | Trp | Phe | Lys | Asp | Gly | Ile | Ser | Met | | |
| | | | 100 | | | | | 105 | | | | | 110 | | | | |
| Leu | Thr | Ala | Asp | Ala | Lys | Lys | Thr | Arg | Ala | Phe | Met | Asn | Ser | Ser | Phe | | |
| | | 115 | | | | | 120 | | | | | 125 | | | | | |
| Thr | Ile | Asp | Pro | Lys | Ser | Gly | Asp | Leu | Ile | Phe | Asp | Pro | Val | Thr | Ala | | |
| | 130 | | | | | 135 | | | | | 140 | | | | | | |
| Phe | Asp | Ser | Gly | Glu | Tyr | Tyr | Cys | Gln | Ala | Gln | Asn | Gly | Tyr | Gly | Thr | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | |
| Ala | Met | Arg | Ser | Glu | Ala | Ala | His | Met | Asp | Ala | Val | Glu | Leu | Asn | Val | | |
| | | | | 165 | | | | | 170 | | | | | 175 | | | |
| Gly | Gly | Ile | Val | Ala | Ala | Val | Leu | Val | Thr | Leu | Ile | Leu | Leu | Gly | Leu | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | |
| Leu | Ile | Phe | Gly | Val | Trp | Phe | Ala | Tyr | Ser | His | Gly | Ser | | | | | |
| | 195 | | | | | | 200 | | | | | 205 | | | | | |

<210> 177
 <211> 542
 <212> DNA
 <213> Mus musculus

<400> 177
 gaattcgcgg cgcgctcgac caagcccaga tggtgctgag catgaacagc ctggagtcgc 60
 tgaatgcggg tgtacagcag aacaatactg agtcctttgc cgctcgtctc tgccatcttg 120
 cagagctcca tgcagaacag ggctgttttg cggctgctgg tgaagtatta aagcacttga 180
 aggaccgatt tccacccaac agtcagcacg cccagttatg gatgctgtgt gatcaaaaaa 240
 tacagtttga cagagcaatg aatgatggca aattccattt ggctgattca cttgttacag 300
 gaatcacagc gcttaatggc atagaagggt tatacaggaa agcagtcgta ctgcaggctc 360
 agaaccaa at gacagaggca cacaagctac tacagaagtt gctgacatac tgtcagaagt 420
 taaagaacac agaaatggtc atcagtgtcc tcctatcggt ggcagagctg tactggcgat 480
 cttcgtcccc gaccatcgcc atgctgtgac tcctggaagc tctggccctc tccaaaggat 540
 cc 542

<210> 178
 <211> 180
 <212> PRT
 <213> Mus musculus

<400> 178
 Ile Arg Gly Arg Val Asp Gln Ala Gln Met Leu Leu Ser Met Asn Ser
 1 5 10 15
 Leu Glu Ser Leu Asn Ala Gly Val Gln Gln Asn Asn Thr Glu Ser Phe
 20 25 30
 Ala Val Ala Leu Cys His Leu Ala Glu Leu His Ala Glu Gln Gly Cys
 35 40 45
 Phe Ala Ala Ala Gly Glu Val Leu Lys His Leu Lys Asp Arg Phe Pro
 50 55 60
 Pro Asn Ser Gln His Ala Gln Leu Trp Met Leu Cys Asp Gln Lys Ile
 65 70 75 80

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Phe | Asp | Arg | Ala | Met | Asn | Asp | Gly | Lys | Phe | His | Leu | Ala | Asp | Ser |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Leu | Val | Thr | Gly | Ile | Thr | Ala | Leu | Asn | Gly | Ile | Glu | Gly | Val | Tyr | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Lys | Ala | Val | Val | Leu | Gln | Ala | Gln | Asn | Gln | Met | Thr | Glu | Ala | His | Lys |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | Leu | Gln | Lys | Leu | Leu | Thr | Tyr | Cys | Gln | Lys | Leu | Lys | Asn | Thr | Glu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Met | Val | Ile | Ser | Val | Leu | Leu | Ser | Val | Ala | Glu | Leu | Tyr | Trp | Arg | Ser |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ser | Ser | Pro | Thr | Ile | Ala | Met | Pro | Val | Leu | Leu | Glu | Ala | Leu | Ala | Leu |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ser | Lys | Gly | Ser | | | | | | | | | | | | |
| | | | 180 | | | | | | | | | | | | |

<210> 179
 <211> 640
 <212> DNA
 <213> Mus musculus

<400> 179

| | | | | | | |
|-------------|-------------|------------|-------------|------------|------------|-----|
| caagtcaatg | tacaaaatgt | ctggcaatgc | ctcattttaa | attaaattgg | tttattgaga | 60 |
| acagctgttt | ttgatgtgta | acgtgaagca | agacagagcc | ctgctgtgag | cagctggcag | 120 |
| aagatttttt | ttttttaatt | attggtacat | attacccttc | aaatctgaga | atttggacta | 180 |
| attgcaccaa | agaaccctct | aatttggtcc | ctggcacatg | cgtacctgtc | aacttttttt | 240 |
| ctttttacaag | acctgcatgc | tgtcggccat | cgccttctcc | aatgtttttg | agcactattt | 300 |
| gggggatgac | atgaaaaggg | aaaacccacc | tgtggaggac | agcagtgatg | aggatgacaa | 360 |
| aagaaaccca | ggaaacttgt | atgacaaggc | aggtaaagtg | aggaagcatg | tgacagagca | 420 |
| agagaaacct | gaagagggct | tgggccccaa | catcaaaagc | attgtgacca | tgctgatgct | 480 |
| catgctcctg | atgatgttcg | cggtcacttg | cacgtgggtc | acaagcaacg | cctactccag | 540 |
| tccaagtgtg | gtccttgccct | cctacaatca | tgatgggtacc | aggaatatat | tagatgattt | 600 |
| tagagaagcg | tacttttggc | tgagacaaaa | caccggatcc | | | 640 |

<210> 180
 <211> 209
 <212> PRT
 <213> Mus musculus

<400> 180

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Met | Tyr | Lys | Met | Ser | Gly | Asn | Ala | Ser | Phe | Lys | Ile | Lys | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Val | Tyr | Glu | Gln | Leu | Phe | Leu | Met | Cys | Asn | Val | Lys | Gln | Asp | Arg | Ala |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Leu | Leu | Ala | Ala | Gly | Arg | Arg | Phe | Phe | Phe | Phe | Asn | Tyr | Trp | Tyr | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Leu | Pro | Phe | Lys | Ser | Glu | Asn | Leu | Asp | Leu | His | Gln | Arg | Thr | Leu | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Pro | Trp | His | Met | Arg | Thr | Cys | Gln | Leu | Phe | Phe | Phe | Tyr | Lys | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Met | Leu | Ser | Ala | Ile | Ala | Phe | Ser | Asn | Val | Phe | Glu | His | Tyr | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Gly | Asp | Asp | Met | Lys | Arg | Glu | Asn | Pro | Pro | Val | Glu | Asp | Ser | Ser | Asp |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Glu | Asp | Asp | Lys | Arg | Asn | Pro | Gly | Asn | Leu | Tyr | Asp | Lys | Ala | Gly | Lys |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Val | Arg | Lys | His | Val | Thr | Glu | Gln | Glu | Lys | Pro | Glu | Glu | Gly | Leu | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Pro | Asn | Ile | Lys | Ser | Ile | Val | Thr | Met | Leu | Met | Leu | Met | Leu | Leu | Met |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Met | Phe | Ala | Val | His | Cys | Thr | Trp | Val | Thr | Ser | Asn | Ala | Tyr | Ser | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Pro | Ser | Val | Val | Leu | Ala | Ser | Tyr | Asn | His | Asp | Gly | Thr | Arg | Asn | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Asp | Asp | Phe | Arg | Glu | Ala | Tyr | Phe | Trp | Leu | Arg | Gln | Asn | Thr | Gly |
| | 195 | | | | | | 200 | | | | | 205 | | | |

Ser

<210> 181
 <211> 671
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (5)...(71)
 <223> n = A, C, G or T

<400> 181

| | | | | | | | | | | | | |
|---------|------|---------|-------|---------|-------|---------|-------|---------|-------|---------|------|-----|
| agccngt | ttta | tctttg | gggta | canaaag | cccc | actgatt | gggt | ttgtgt | tatt | ttatat | caag | 60 |
| ctactgc | act | naagct | gttt | atctgg | ttta | ggagtt | ctct | gggtga | atttt | agggtc | actt | 120 |
| atatata | cta | tcatat | catc | tgcaa | atagt | gatatt | ttttg | acttct | tctt | tccaat | ttgt | 180 |
| atcccct | tga | cctcct | ttttg | ttgtg | gaatt | gctctg | ggcta | ggactt | caag | tactat | attg | 240 |
| aataggt | ggg | gagaa | agtgg | cagctt | gtct | agtcct | gat | tttagt | ggga | ttgctt | ccag | 300 |
| tttctat | cca | tttact | tttga | tgttgg | ctac | tggttt | gctg | tagatt | gctt | ttattat | gtt | 360 |
| caggat | tggg | ccttga | attc | ctgatc | tttc | caagact | tttt | atcttg | aatg | gggtgt | tgat | 420 |
| tttgtca | aat | gctttt | tccg | catcta | atga | tcatgt | gggt | tttgtc | ttttg | agtttg | cttt | 480 |
| tatagt | ggat | tacaat | gatg | gatttc | cgta | tattaa | acca | tccctg | catc | cctggg | atga | 540 |
| agtctac | tgt | gtcatg | atgg | atgatc | attt | tgatgt | gttc | ttggatt | tttg | tttgct | agga | 600 |
| ttttatt | gag | tattttt | tgca | ttgat | attca | taaggga | aat | tggtct | gaag | ttctct | atcc | 660 |
| ttgttg | gatc | c | | | | | | | | | | 671 |

<210> 182
 <211> 212
 <212> PRT
 <213> Mus musculus

<220>

<221> UNSURE
 <222> (7)...(7)
 <223> Xaa = any amino acid

<400> 182

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Val | Tyr | Leu | Trp | Val | Xaa | Lys | Ala | His | Leu | Val | Cys | Val | Ile | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Tyr | Gln | Ala | Thr | Ala | Leu | Lys | Leu | Phe | Ile | Trp | Phe | Arg | Ser | Ser | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Val | Asn | Phe | Arg | Val | Thr | Tyr | Ile | Tyr | Tyr | His | Ile | Ile | Cys | Lys | Tyr |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Phe | Leu | Leu | Leu | Ser | Asn | Leu | Tyr | Pro | Leu | Asp | Leu | Leu | Leu | Leu | Trp |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Asn | Cys | Ser | Gly | Asp | Phe | Lys | Tyr | Tyr | Ile | Glu | Val | Gly | Arg | Lys | Trp |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Gln | Leu | Val | Ser | Leu | Ile | Leu | Val | Gly | Leu | Leu | Pro | Val | Ser | Ile | His |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Leu | Leu | Cys | Trp | Leu | Leu | Val | Cys | Cys | Arg | Leu | Leu | Leu | Leu | Cys | Ser |
| | | | 100 | | | | | 105 | | | | | | 110 | |
| Gly | Met | Gly | Leu | Glu | Phe | Leu | Ile | Phe | Pro | Arg | Leu | Leu | Ser | Met | Gly |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Val | Gly | Phe | Cys | Gln | Met | Leu | Phe | Pro | His | Leu | Met | Ile | Met | Trp | Phe |
| | 130 | | | | | 135 | | | | | | 140 | | | |
| Leu | Ser | Leu | Ser | Leu | Leu | Leu | Trp | Ile | Thr | Met | Met | Asp | Phe | Arg | Ile |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Asn | His | Pro | Cys | Ile | Pro | Gly | Met | Lys | Ser | Thr | Trp | Ser | Trp | Met |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ile | Ile | Leu | Met | Cys | Ser | Trp | Ile | Trp | Phe | Ala | Arg | Ile | Leu | Leu | Ser |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ile | Phe | Ala | Leu | Ile | Phe | Ile | Arg | Glu | Ile | Gly | Leu | Lys | Phe | Ser | Ile |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Leu | Val | Gly | Ser | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | |

<210> 183
 <211> 637
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (23)...(99)
 <223> n = A, C, G or T

<400> 183

| | | | | | | |
|------------|------------|-------------|-------------|------------|-------------|-----|
| aagtcaatgt | acaaaatgtc | tgncaatgcn | tcattttaaaa | ttaaattggt | ttattgagac | 60 |
| agctgtttnt | gatgtgtaac | gtgaagcaag | acagagccnt | gttgtgagca | gtggcagaag | 120 |
| atTTTTTTTT | tttaattatt | ggtacatatt | acccttcaaa | tctgagaatt | tggaactaatt | 180 |
| gcaccaaaga | accctcta | attggtccctg | gcacatgcgt | acctgtcaac | tttttttctt | 240 |

```

ttacaagacc tgcattgctgt cggccatcgc cttctccaat gtttttgagc actatttggg 300
ggatgacatg aaaagggaaa acccacctgt ggaggacagc agtgatgagg atgacaaaag 360
aaaccagga aacttgtatg acaaggcagg taaagtgagg aagcatgtga cagagcaaga 420
gaaacctgaa gagggcttgg gcccacacat caaaagcatt gtgaccatgc tgatgctcat 480
gctcctgatg atgttcgcgg tccactgcac gtgggtcaca agcaacgcct actccagtcc 540
aagtgtggtc cttgcctcct acaatcatga tggtagcagg aatatattag atgatttttag 600
agaagcgtac ttttggtctga gacaaaacac cggatcc 637

```

<210> 184

<211> 209

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (8)...(32)

<223> Xaa = any amino acid

<400> 184

```

Ser Gln Cys Thr Lys Cys Leu Xaa Met Xaa His Leu Lys Leu Asn Trp
1      5      10      15
Phe Ile Glu Thr Ala Val Xaa Asp Val Arg Glu Ala Arg Gln Ser Xaa
20      25      30
Val Val Ser Ser Gly Arg Arg Phe Phe Phe Phe Asn Tyr Trp Tyr Ile
35      40      45
Leu Pro Phe Lys Ser Glu Asn Leu Asp Leu His Gln Arg Thr Leu Phe
50      55      60
Gly Pro Trp His Met Arg Thr Cys Gln Leu Phe Phe Phe Tyr Lys Thr
65      70      75      80
Cys Met Leu Ser Ala Ile Ala Phe Ser Asn Val Phe Glu His Tyr Leu
85      90      95
Gly Asp Asp Met Lys Arg Glu Asn Pro Pro Val Glu Asp Ser Ser Asp
100     105     110
Glu Asp Asp Lys Arg Asn Pro Gly Asn Leu Tyr Asp Lys Ala Gly Lys
115     120     125
Val Arg Lys His Val Thr Glu Gln Glu Lys Pro Glu Glu Gly Leu Gly
130     135     140
Pro Asn Ile Lys Ser Ile Val Thr Met Leu Met Leu Met Leu Leu Met
145     150     155     160
Met Phe Ala Val His Cys Thr Trp Val Thr Ser Asn Ala Tyr Ser Ser
165     170     175
Pro Ser Val Val Leu Ala Ser Tyr Asn His Asp Gly Thr Arg Asn Ile
180     185     190
Leu Asp Asp Phe Arg Glu Ala Tyr Phe Trp Leu Arg Gln Asn Thr Gly
195     200     205
Ser

```

<210> 185

<211> 669
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (8)...(119)
 <223> n = A, C, G or T

<400> 185
 cgccccancc aancgtgttcg ccaggctaaa ggcgcgcatg cgcacggcga gnatctcgtc 60
 gtgacccatg ccgatgcntg cttgccnaat atcatgggtga aaatggccgc tttttctgna 120
 ttcacgcact gtggccggct ggggtgtggcg gaccgctatc aggacatagc gttggctacc 180
 cgtgatattg ctaagagctt ggcggcgaat gggctgaccg cttcctcgtg ctttacggta 240
 tcgccgctcc cgattcgcag cgcacgcctt tctatcgctt tcttgacgag ttcttctgaa 300
 ttgaaaaaga agagtaagct tgaattcgcg gccgcgtcga ccgcggctac aacctccgga 360
 gcgatgcccg tggggggcct gttgccgctc ttcagtagcc ctggggggcg cggcctgggc 420
 agtggcctgg gcggggggct tggcggcggg aggaaggggt ctggccccgc tgccttccgc 480
 ctcaccgaga agttcgtgct gctgctggtg ttcagcgctt tcatcacgct ctgcttcggg 540
 gcaatcttct tcctgcctga ctccctccaag ctgctcagcg gggtcctgtt ccaactccaac 600
 cctgccttgc agccgcgcgc ggagcacaag cccgggctcg gggcgcgctg ggaggatgcc 660
 gccggatcc 669

<210> 186
 <211> 223
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (3)...(40)
 <223> Xaa = any amino acid

<400> 186
 Arg Pro Xaa Gln Xaa Val Arg Gln Ala Lys Gly Ala His Ala Asp Gly
 1 5 10 15
 Glu Xaa Leu Val Val Thr His Ala Asp Ala Cys Leu Pro Asn Ile Met
 20 25 30
 Val Lys Met Ala Ala Phe Ser Xaa Phe Ile Asp Cys Gly Arg Leu Gly
 35 40 45
 Val Ala Asp Arg Tyr Gln Asp Ile Ala Leu Ala Thr Arg Asp Ile Ala
 50 55 60
 Lys Ser Leu Ala Ala Asn Gly Leu Thr Ala Ser Ser Cys Phe Thr Val
 65 70 75 80
 Ser Pro Leu Pro Ile Arg Ser Ala Ser Pro Ser Ile Ala Phe Leu Thr
 85 90 95
 Ser Ser Ser Glu Leu Lys Lys Lys Ser Lys Leu Glu Phe Ala Ala Ala
 100 105 110
 Ser Thr Ala Ala Thr Thr Ser Gly Ala Met Pro Val Gly Gly Leu Leu
 115 120 125

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Leu | Phe | Ser | Ser | Pro | Gly | Gly | Gly | Gly | Leu | Gly | Ser | Gly | Leu | Gly |
| 130 | | | | | | 135 | | | | | 140 | | | | |
| Gly | Gly | Leu | Gly | Gly | Gly | Arg | Lys | Gly | Ser | Gly | Pro | Ala | Ala | Phe | Arg |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Thr | Glu | Lys | Phe | Val | Leu | Leu | Leu | Val | Phe | Ser | Ala | Phe | Ile | Thr |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Leu | Cys | Phe | Gly | Ala | Ile | Phe | Phe | Leu | Pro | Asp | Ser | Ser | Lys | Leu | Leu |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ser | Gly | Val | Leu | Phe | His | Ser | Asn | Pro | Ala | Leu | Gln | Pro | Pro | Ala | Glu |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| His | Lys | Pro | Gly | Leu | Gly | Ala | Arg | Ala | Glu | Asp | Ala | Ala | Gly | Ser | |
| 210 | | | | | | 215 | | | | | 220 | | | | |

<210> 187

<211> 280

<212> DNA

<213> Mus musculus

<400> 187

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gaattcgcgg | cgcgctcgac | ctcagcttga | tctactggac | ttgatttgga | aaaaaaagtt | 60 |
| ataactttca | acaccaactt | aaaatgtaat | ttccttattt | cataaggtgg | gggaactgaa | 120 |
| attcatgatc | tagaaggagc | ttaaggtatt | atctagggat | agttcctccc | ttttgggggt | 180 |
| gattcttata | atactttctg | taattttctc | tataaatatt | aatatgtatt | tattgtgtgt | 240 |
| gggtatgcat | atatatgtat | gtatatatga | atatggatcc | | | 280 |

<210> 188

<211> 217

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (3)...(37)

<223> Xaa = any amino acid

<400> 188

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Val | Xaa | Gly | Asn | Arg | Ser | Cys | Arg | Xaa | Gly | Xaa | Gly | Arg | Xaa | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ile | Arg | Gly | Ser | Arg | Pro | Pro | Xaa | Leu | Phe | Ala | Arg | Xaa | Lys | Ala | Arg |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| His | Ala | Arg | Arg | Xaa | Arg | Ser | Ser | Ser | Val | Thr | His | Gly | Asp | Ala | Cys |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Leu | Pro | Asn | Ile | Met | Val | Lys | Met | Ala | Ala | Phe | Leu | Asn | Ser | Ser | Thr |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Val | Ala | Gly | Trp | Val | Trp | Arg | Pro | Leu | Ser | Asp | Ile | Ala | Leu | Ala | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Arg | Asp | Ile | Ala | Glu | Leu | Gly | Gly | Glu | Trp | Ala | Asp | Arg | Phe | Leu | |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Val | Leu | Tyr | Gly | Ile | Ala | Ala | Pro | Asp | Ser | Gln | Arg | Ile | Ala | Phe | Tyr |

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | 100 | | | | | 105 | | | | | 110 | | | | |
| Arg | Leu | Leu | Asp | Glu | Phe | Phe | Ile | Glu | Lys | Gly | Arg | Val | Ser | Leu | Asn | | |
| | | 115 | | | | | 120 | | | | | 125 | | | | | |
| Ser | Arg | Pro | Arg | Arg | Pro | Gln | Leu | Asp | Leu | Leu | Asp | Leu | Ile | Trp | Lys | | |
| | 130 | | | | | 135 | | | | | 140 | | | | | | |
| Lys | Lys | Leu | Leu | Ser | Thr | Pro | Thr | Asn | Val | Ile | Ser | Leu | Phe | His | Lys | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | |
| Val | Gly | Glu | Leu | Lys | Phe | Met | Ile | Lys | Glu | Leu | Lys | Val | Leu | Ser | Arg | | |
| | | | 165 | | | | | 170 | | | | | 175 | | | | |
| Asp | Ser | Ser | Ser | Leu | Leu | Gly | Leu | Ile | Leu | Ile | Ile | Leu | Ser | Val | Ile | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | |
| Phe | Ser | Ile | Asn | Ile | Asn | Met | Tyr | Leu | Leu | Cys | Val | Gly | Met | His | Ile | | |
| | 195 | | | | | | 200 | | | | | 205 | | | | | |
| Tyr | Val | Cys | Ile | Tyr | Glu | Tyr | Gly | Ser | | | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | | | |

<210> 189
 <211> 479
 <212> DNA
 <213> Mus musculus

<400> 189
 gaattcgcgg cgcgctcgac gagattatga gtttttatgt taataatttc tgattttgta 60
 tagatttttag tcatcattaa ataaaactta cctagttatg tctcagttct caagaaagtc 120
 tgaggaggca aagatgacta tcttctaatt ggttttgagg gattctcatt aatgtgtaac 180
 ctttttggtta agctgccaaag cctcacagat gagtgtgaag ctagagatgt tgaatcttgc 240
 aggctgcatt accaattctg catcatcatc tagatttttc ctcttatgtc aatgatcatt 300
 tggaaatttta ctggtgctgt cttaaaaggg aaatcatggt taaggattca gataatagaa 360
 tatttaaaaaa ttttcaacag atatttcctt tgtgctctct atggacaggt tattttattta 420
 ttacttttct gttttgttct gatgtactta ctccatatgc ctggaaagtc cttggatcc 479

<210> 190
 <211> 148
 <212> PRT
 <213> Mus musculus

<400> 190
 Ile Arg Gly Arg Val Asp Glu Ile Met Ser Phe Tyr Val Asn Asn Phe
 1 5 10 15
 Phe Cys Ile Asp Phe Ser His His Ile Lys Leu Thr Leu Cys Leu Ser
 20 25 30
 Ser Gln Glu Ser Leu Arg Arg Gln Arg Leu Ser Ser Asn Trp Phe Gly
 35 40 45
 Ile Leu Ile Asn Val Pro Phe Cys Ala Ala Lys Pro His Arg Val Ser
 50 55 60
 Arg Cys Ile Leu Gln Ala Ala Leu Pro Ile Leu His His His Leu Asp
 65 70 75 80
 Phe Ser Ser Tyr Val Asn Asp His Leu Glu Ile Tyr Trp Cys Cys Leu
 85 90 95

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Arg | Glu | Ile | Met | Phe | Lys | Asp | Ser | Asp | Asn | Arg | Ile | Phe | Lys | Asn |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Gln | Gln | Ile | Phe | Pro | Leu | Cys | Ser | Leu | Trp | Thr | Gly | Tyr | Leu | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Ile | Tyr | Phe | Leu | Phe | Cys | Ser | Asp | Val | Leu | Thr | Pro | Tyr | Ala | Trp | Lys |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Leu | Gly | Ser | | | | | | | | | | | | |
| 145 | | | | | | | | | | | | | | | |

<210> 191
 <211> 289
 <212> DNA
 <213> Mus musculus

<400> 191
 gaattcgcgg cgcgctcgac gccaaagactt cacacagttc tgattgtccc agaagccttg 60
 cgtttggtcaa aacatgacaa tgagatatga aaacttccag aacttggagc gggaagagaa 120
 aaaccaggag atgagaaatg gtgacaagaa aggaggaatg gagtctccaa agtttgctct 180
 aattccttcc cagtccttcc tgtggcgcac cctctcttgg acccacctcc tcctgttctc 240
 cctgggcctc agcctcctgc tactggtggt catctccgtg attggatcc 289

<210> 192
 <211> 95
 <212> PRT
 <213> Mus musculus

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Arg | Gln | Asp | Phe | Thr | Gln | Phe | Leu | Ser | Gln |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Lys | Pro | Cys | Val | Cys | Gln | Asn | Met | Thr | Met | Arg | Tyr | Glu | Asn | Phe | Gln |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Asn | Leu | Glu | Arg | Glu | Glu | Lys | Asn | Gln | Glu | Met | Arg | Asn | Gly | Asp | Lys |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Lys | Gly | Gly | Met | Glu | Ser | Pro | Lys | Phe | Ala | Leu | Ile | Pro | Ser | Gln | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Phe | Leu | Trp | Arg | Ile | Leu | Ser | Trp | Thr | His | Leu | Leu | Leu | Phe | Ser | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Gly | Leu | Ser | Leu | Leu | Leu | Leu | Val | Val | Ile | Ser | Val | Ile | Gly | Ser | |
| | | | 85 | | | | | | 90 | | | | | 95 | |

<210> 193
 <211> 658
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (24)...(152)

<223> n = A, C, G or T

<400> 193

```
aaactgacgg catgatgagg acantatgac gaaagtaaag gttacaaaan gagctgagaa 60
cagctgggtc cagtgcgaag anacacggcc aggttggcaa anaggtgcag cggcacaggc 120
cgactcgnag cgcacatgaa ggatctacgc anccgactcg ggcagtaccg caacgaggtg 180
cacaccatgt tgggccagag cacagaggag atacggggcg ggctctccac acacctgcgc 240
aagatgcgca agcgcttgat gcgggatgcc gaggatctgc agaagcgccct agcttgtgta 300
caaggcaggg gcacgcgagg gcgccgagcg cgggtgtgagt gccatccgtg agcgccctggg 360
gcctctggtg gagcaaggtc gccagcgcac cgccaaccta ggcgctgggg ccgcccagcc 420
tctgcgcgat cgcgcccagg cttttggtga ccgcatccga gggcggctgg aggaagtggg 480
caaccaggcc cgtgaccgcc tagaggaggt gcgtgagcac atggaggagg tgcgctccaa 540
gatggaggaa ctctcgagtc ccagcatcag agcgcggtgga ccttttcccg cgtcccgcag 600
catgcaggtc tcccgtgtgc tggccgcgct gtgcggcatg ctactctgcg ccggatcc 658
```

<210> 194

<211> 215

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (7)...(49)

<223> Xaa = any amino acid

<400> 194

```
Asn Arg His Asp Glu Asp Xaa Met Thr Lys Val Lys Val Thr Lys Xaa
1      5      10      15
Ala Glu Asn Ser Trp Val Gln Cys Glu Xaa Thr Arg Pro Gly Trp Gln
20      25      30
Xaa Gly Ala Ala Gln Ala Asp Ser Xaa Pro Thr Arg Ile Tyr Ala
35      40      45
Xaa Asp Ser Gly Ser Thr Ala Thr Arg Cys Thr Pro Cys Trp Ala Arg
50      55      60
Ala Gln Arg Arg Tyr Gly Arg Gly Ser Pro His Thr Cys Ala Arg Cys
65      70      75      80
Ala Ser Ala Cys Gly Met Pro Arg Ile Cys Arg Ser Ala Leu Val Tyr
85      90      95
Lys Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Val Ser Ala Ile Arg
100     105     110
Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Gln Arg Thr Ala Asn
115     120     125
Leu Gly Ala Gly Ala Ala Gln Pro Leu Arg Asp Arg Ala Gln Ala Phe
130     135     140
Gly Asp Arg Ile Arg Gly Arg Leu Glu Glu Val Gly Asn Gln Ala Arg
145     150     155     160
Asp Arg Leu Glu Glu Val Arg Glu His Met Glu Glu Val Arg Ser Lys
165     170     175
Met Glu Glu Leu Ser Ser Pro Ser Ile Arg Ala Arg Gly Pro Phe Pro
180     185     190
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Arg | Ser | Met | Gln | Val | Ser | Arg | Val | Leu | Ala | Ala | Leu | Cys | Gly |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Met | Leu | Leu | Cys | Ala | Gly | Ser | | | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 195
 <211> 412
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (14)...(14)
 <223> n = A, C, G or T

<400> 195
 gaattcgcgg ccgnggcgac cttttttttt tttttttttt tttttttttt tttttttttt 60
 tttccaagat aaaactttat tggagacagc aaggagtata ctgaaagtgg gggagccatg 120
 ccttcattcc ataactgcaa tcagatgctc tcctctgaga gagagtgtgt ggggagccaa 180
 ggtgagaagc aggtatgatt cacaccccaa ctgcttggag agtgcttata tgacagtctt 240
 tttctcgatt ttattttttc tcagttcttc aacacacact ttggcttcat ttgggggaaa 300
 attaaacaaa agaacagaat ttccctcccc cagagttact tatgaaatga cacagctgcc 360
 cttttctttg aagggtattct tgtcttctgg gattcccttt accagaggat cc 412

<210> 196
 <211> 670
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (43)...(107)
 <223> n = A, C, G or T

<400> 196
 acaagcccta gccttgtgtc atggcttcaa tttggacatt gancatccca tgacnttcca 60
 agagaatgca aaagnctttg nacagagtgt ggtccagctt ggcggancca gtgtgggtgt 120
 tgcagccccc cagaaggcaa aggctgttaa ccagacaggt gccctctacc agtgtgacta 180
 cagcacaagc cgggtgtgacc ccattccccct gcaagtacct ccagaggctg tgaatatgtc 240
 cttgggcctg tccctggctg tttctactgt cccccagcag ctgctggcct gtggccccac 300
 ggtgcaccaa aaactgcaagg agaatactta tgtgaatgga ttgtgctatt tggtcggctc 360
 caacctgctg aggccgcccc agcagttccc agaggctctc agagaatgtc ctcagcagga 420
 gagtgacatt gtcttcttga ttgatggctc cggtagcatc aacaacattg actttcagaa 480
 gatgaaggag tttgtctcaa ctgtgatgga gcagttcaaa aagtctaaaa ccttgttctc 540
 tttgatgcag tactcggaag agttccggat tcacttcacc ttcaatgact tcaagagaaa 600
 ccctagccca agatcacacg tgagcccat aaagcagctg aatgggagga caaaaactgc 660
 ctcgggatcc 670

<210> 197

<211> 223
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (14)...(36)
 <223> Xaa = any amino acid

<400> 197
 Gln Ala Leu Ala Leu Cys His Gly Phe Asn Leu Asp Ile Xaa His Pro
 1 5 10 15
 Met Thr Phe Gln Glu Asn Ala Lys Xaa Phe Xaa Gln Ser Val Val Gln
 20 25 30
 Leu Gly Gly Xaa Ser Val Val Val Ala Ala Pro Gln Lys Ala Lys Ala
 35 40 45
 Val Asn Gln Thr Gly Ala Leu Tyr Gln Cys Asp Tyr Ser Thr Ser Arg
 50 55 60
 Cys Asp Pro Ile Pro Leu Gln Val Pro Pro Glu Ala Val Asn Met Ser
 65 70 75 80
 Leu Gly Leu Ser Leu Ala Val Ser Thr Val Pro Gln Gln Leu Leu Ala
 85 90 95
 Cys Gly Pro Thr Val His Gln Asn Cys Lys Glu Asn Thr Tyr Val Asn
 100 105 110
 Gly Leu Cys Tyr Leu Phe Gly Ser Asn Leu Leu Arg Pro Pro Gln Gln
 115 120 125
 Phe Pro Glu Ala Leu Arg Glu Cys Pro Gln Gln Glu Ser Asp Ile Val
 130 135 140
 Phe Leu Ile Asp Gly Ser Gly Ser Ile Asn Asn Ile Asp Phe Gln Lys
 145 150 155 160
 Met Lys Glu Phe Val Ser Thr Val Met Glu Gln Phe Lys Lys Ser Lys
 165 170 175
 Thr Leu Phe Ser Leu Met Gln Tyr Ser Asp Glu Phe Arg Ile His Phe
 180 185 190
 Thr Phe Asn Asp Phe Lys Arg Asn Pro Ser Pro Arg Ser His Val Ser
 195 200 205
 Pro Ile Lys Gln Leu Asn Gly Arg Thr Lys Thr Ala Ser Gly Ser
 210 215 220

<210> 198
 <211> 640
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (21)...(21)
 <223> n = A, C, G or T

<400> 198

```
ctgttgatgg cttttacatg nacgcctatg aagtcagcaa tgcggatttt gagaagtttg 60
tgaactcgac tggctatttg acagagctga gaagtttgaa gactctttcg tctttgaagg 120
catgttgagc gagcaagtga aaacgcatat ccaccaggca gttgcagctg ctccatgggtg 180
gttgccctgtc aagggagcta attggagaca cccagagggg cgggactcca gtattctgca 240
caggtcaaat catccggttc tccatgtttc ctggaacgat gctgttgccct actgcacatg 300
ggcgggcaag aggttgccta ctgaggcaga gtgggaatac agctgtagag gaggcctgca 360
gaacaggcctt ttcccctggg gcaacaaact gcagcccaaa ggacagcatt atgccaacat 420
ctggcagggc aagtttcctg tgagcaacac tggcgaggat ggcttccaag gaactgcccc 480
cgttgatgcc tttcctccca atggctatgg cttatacaac atagtgggga atgtgtggga 540
gtggacctca gactggtgga ctgttcacca ttctgttgag gaaacgttca acccaaaggg 600
tcccacttct gggaaagacc gagtgaagaa ggggtgatcc 640
```

<210> 199

<211> 210

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (6)...(6)

<223> Xaa = any amino acid

<400> 199

```
Cys Trp Leu Leu His Xaa Arg Leu Ser Gln Gln Cys Gly Phe Glu Val
 1          5          10          15
Cys Glu Leu Asp Trp Leu Phe Asp Arg Ala Glu Lys Phe Glu Asp Ser
 20          25          30
Phe Val Phe Glu Gly Met Leu Ser Glu Gln Val Lys Thr His Ile His
 35          40          45
Gln Ala Val Ala Ala Ala Pro Trp Trp Leu Pro Val Lys Gly Ala Asn
 50          55          60
Trp Arg His Pro Glu Gly Pro Asp Ser Ser Ile Leu His Arg Ser Asn
 65          70          75          80
His Pro Val Leu His Val Ser Trp Asn Asp Ala Val Ala Tyr Cys Thr
 85          90          95
Trp Ala Gly Lys Arg Leu Pro Thr Glu Ala Glu Trp Glu Tyr Ser Cys
100          105          110
Arg Gly Gly Leu Gln Asn Arg Leu Phe Pro Trp Gly Asn Lys Leu Gln
115          120          125
Pro Lys Gly Gln His Tyr Ala Asn Ile Trp Gln Gly Lys Phe Pro Val
130          135          140
Ser Asn Thr Gly Glu Asp Gly Phe Gln Gly Thr Ala Pro Val Asp Ala
145          150          155          160
Phe Pro Pro Asn Gly Tyr Gly Leu Tyr Asn Ile Val Gly Asn Val Trp
165          170          175
Glu Trp Thr Ser Asp Trp Trp Thr Val His His Ser Val Glu Glu Thr
180          185          190
Phe Asn Pro Lys Gly Pro Thr Ser Gly Lys Asp Arg Val Lys Lys Gly
195          200          205
```

Gly Ser
210

<210> 200
<211> 263
<212> DNA
<213> Mus musculus

<400> 200
gaattcgcgg ccgcgtcgac ggccagcctg gtctacagag tggattcctg tcctgtcagg 60
gctgcacgat gagtccctat ctcaaagaag aagaaaaaaaa aaaaagaaag aaagaaagac 120
ttctttttga aatatttagac aaccaatatg acaaaatacg aatgccaaac atcctgctgt 180
accgtacgat ctattttttgt tttttttttt ggttggttgtt cttgaccaa ataatgatt 240
accggaggca atcacatgga tcc 263

<210> 201
<211> 87
<212> PRT
<213> Mus musculus

<400> 201
Ile Arg Gly Arg Val Asp Gly Gln Pro Gly Leu Gln Ser Gly Phe Leu
1 5 10 15
Ser Cys Gln Gly Cys Thr Met Ser Pro Tyr Leu Lys Glu Glu Glu Lys
20 25 30
Lys Lys Arg Lys Lys Glu Arg Leu Leu Phe Glu Ile Leu Asp Asn Gln
35 40 45
Tyr Asp Lys Ile Arg Met Pro Asn Ile Leu Leu Tyr Arg Thr Ile Tyr
50 55 60
Phe Cys Phe Phe Phe Trp Leu Leu Phe Leu Thr Lys Ile Asn Asp Tyr
65 70 75 80
Arg Arg Gln Ser His Gly Ser
85

<210> 202
<211> 544
<212> DNA
<213> Mus musculus

<400> 202
gaattcgcgg ccgcgtcgac ctgtacgatt gtcagtggat ctgacgacac caaaaggggt 60
caggatgcta ctggtgcaag ctctcctgtt cctcttaatc ctgcccagtc atgccgaaga 120
tgacgttact acaactgaag agctagctcc tgctttggtc cctccacca agggaacttg 180
tgacaggttg atggcaggca tcccaggaca tcctggccac aatggcacac caggccgtga 240
tggcagagat ggcaactcctg gagagaaggg agagaaagga gatgcaggtc ttcttggtcc 300
taaggggtgag acaggagatg ttggaatgac aggagctgaa gggccacggg gcttccccgg 360
aacccttggc aggaaaggag agcctggaga agccgcttat gtgtatcgct cagcgttcag 420
tgtgggggctg gagaccgcgc tcaactgttcc caatgtaccc attcgcttta ctaagatctt 480

ctacaaccaa cagaatcatt atgacggcag cactggcaag ttctactgca acattccagg 540
atcc 544

<210> 203
<211> 181
<212> PRT
<213> Mus musculus

<400> 203
Asn Ser Arg Pro Arg Arg Pro Val Arg Leu Ser Val Asp Leu Thr Thr
1 5 10 15
Pro Lys Gly Leu Arg Met Leu Leu Leu Gln Ala Leu Leu Phe Leu Leu
20 25 30
Ile Leu Pro Ser His Ala Glu Asp Asp Val Thr Thr Thr Glu Glu Leu
35 40 45
Ala Pro Ala Leu Val Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met
50 55 60
Ala Gly Ile Pro Gly His Pro Gly His Asn Gly Thr Pro Gly Arg Asp
65 70 75 80
Gly Arg Asp Gly Thr Pro Gly Glu Lys Gly Glu Lys Gly Asp Ala Gly
85 90 95
Leu Leu Gly Pro Lys Gly Glu Thr Gly Asp Val Gly Met Thr Gly Ala
100 105 110
Glu Gly Pro Arg Gly Phe Pro Gly Thr Pro Gly Arg Lys Gly Glu Pro
115 120 125
Gly Glu Ala Ala Tyr Val Tyr Arg Ser Ala Phe Ser Val Gly Leu Glu
130 135 140
Thr Arg Val Thr Val Pro Asn Val Pro Ile Arg Phe Thr Lys Ile Phe
145 150 155 160
Tyr Asn Gln Gln Asn His Tyr Asp Gly Ser Thr Gly Lys Phe Tyr Cys
165 170 175
Asn Ile Pro Gly Ser
180

<210> 204
<211> 244
<212> DNA
<213> Mus musculus

<400> 204
gaattcgcgg ccgcgtcgac cattatTTTT ggttggttgt cttggggttag cattaaagcc 60
ttcacctatt tatggaggtt taggtttaat tgtagtgagg tttggttggt gtttaatggt 120
tttaggggtt ggtggatcgt ttttaggttt aatagttttt ttaatttatt taggggggat 180
gttggttgtg tttggatata cgactgctat agctactgag gaatatccag agacttgtgg 240
atcc 244

<210> 205
<211> 81
<212> PRT

<213> Mus musculus

<400> 205

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Pro | Leu | Phe | Leu | Val | Gly | Cys | Leu | Gly | Leu |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Ala | Leu | Lys | Pro | Ser | Pro | Ile | Tyr | Gly | Gly | Leu | Gly | Leu | Ile | Val | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gly | Phe | Val | Gly | Cys | Leu | Met | Val | Leu | Gly | Phe | Gly | Gly | Ser | Phe | Leu |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Gly | Leu | Ile | Val | Phe | Leu | Ile | Tyr | Leu | Gly | Gly | Met | Leu | Val | Val | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Tyr | Thr | Thr | Ala | Ile | Ala | Thr | Glu | Glu | Tyr | Pro | Glu | Thr | Cys | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | | | | | | | | | | | | | | | |

<210> 206

<211> 244

<212> DNA

<213> Mus musculus

<400> 206

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| gaattcgcgg | ccgcgtcgac | cattatTTTT | ggttggttgt | cttggggttag | cattaaagcc | 60 |
| ttcacctatt | tatggagggt | taggtTTaat | tgtagtgagg | tttggttggt | gtttaatggt | 120 |
| tttaggggtt | ggtggatcgt | ttttaggttt | aatagttttt | ttaatttatt | taggggggat | 180 |
| gttggttgtg | tttggatata | cgactgctat | agctactgag | gaatatccag | agacttgtgg | 240 |
| atcc | | | | | | 244 |

<210> 207

<211> 81

<212> PRT

<213> Mus musculus

<400> 207

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Pro | Leu | Phe | Leu | Val | Gly | Cys | Leu | Gly | Leu |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Ala | Leu | Lys | Pro | Ser | Pro | Ile | Tyr | Gly | Gly | Leu | Gly | Leu | Ile | Val | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gly | Phe | Val | Gly | Cys | Leu | Met | Val | Leu | Gly | Phe | Gly | Gly | Ser | Phe | Leu |
| | | 35 | | | | 40 | | | | | | 45 | | | |
| Gly | Leu | Ile | Val | Phe | Leu | Ile | Tyr | Leu | Gly | Gly | Met | Leu | Val | Val | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Tyr | Thr | Thr | Ala | Ile | Ala | Thr | Glu | Glu | Tyr | Pro | Glu | Thr | Cys | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | | | | | | | | | | | | | | | |

<210> 208

<211> 235
<212> DNA
<213> Mus musculus

<400> 208
gaattcgcgg cgcgctcgac ctagtgtgct ctttgagatt ttttaagagca tttgagatac 60
aagaattttg aggggatgag gaatgttggc caaggctctaa atcacacata aaaaattttc 120
ttctgtgaat ttatcttctt tgcataatata tccctgctgg ccccttggtt tgattttggt 180
attggtcatt ccagctctca gtggaagacc ggaccctgtc attcatgaag gatcc 235

<210> 209
<211> 675
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (81)...(267)
<223> n = A, C, G or T

<400> 209
gaattcgcgg cgcgctcgac ccacgttttt tgacccacaa ccgcaagttt tagatcctcg 60
cgagtaggaa atgaaggggt nccacacaga aggcagcgcc cactgggctc cactgatgca 120
ggttgccac cagaccacat cactctggcc ctgggctcag ggcattgatgt gagtgtgaga 180
gctttggccc ggttgccatt aagactcact ccaggtcaca ctgagggcaa gggttgctag 240
tccctggccg ctgggactct ctcatcntga gttctcccat caccatcact aagaatgttt 300
ttctggtaac cgaagttgaa ttgagacatc caaggtcac tatgcatttg gacaagattc 360
agacatctag gcggtttgtc cggctttacc ggggagaatc taaaaaagaa gcacattcat 420
cctccattat tttgatgtca tatctaagac aaaatgtcaa taaatgaagt atcaacattc 480
tatatcataa aagaagatac aattgcaatg ggaggtgcac aaataatgct tggcctaatt 540
cacaatgcac tggggactct ctggctctct ttgcacaatc tagaagacaa gagatatagc 600
atcggccata aacttatgtt agctagtatc tgctacctgt ttgtgtctgg aacatttttc 660
atcaactcag gatcc 675

<210> 210
<211> 218
<212> PRT
<213> Mus musculus

<400> 210
Glu Phe Ala Ala Ala Ser Thr His Val Phe Pro Thr Thr Ala Ser Phe
1 5 10 15
Arg Ser Ser Arg Val Gly Asn Glu Gly Val Pro His Arg Arg Gln Arg
20 25 30
Pro Leu Gly Ser Thr Asp Ala Gly Cys Pro Pro Asp His Ile Thr Leu
35 40 45
Ala Leu Gly Ser Gly His Asp Val Ser Val Arg Ala Leu Ala Arg Leu
50 55 60
Pro Leu Arg Leu Thr Pro Gly His Thr Glu Gly Lys Gly Cys Ser Leu
65 70 75 80

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Ala | Ala | Gly | Thr | Leu | Ser | Ser | Val | Leu | Pro | Ser | Pro | Ser | Leu | Arg | Met | |
| | | | | 85 | | | | | 90 | | | | | 95 | | |
| Phe | Phe | Trp | Pro | Lys | Leu | Asn | Asp | Ile | Gln | Gly | His | Leu | Cys | Ile | Trp | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Thr | Arg | Phe | Arg | His | Leu | Gly | Gly | Leu | Ser | Gly | Phe | Thr | Gly | Glu | Asn | |
| | | 115 | | | | 120 | | | | | | 125 | | | | |
| Leu | Lys | Lys | Lys | His | Ile | His | Pro | Pro | Leu | Phe | Cys | His | Ile | Asp | Lys | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Met | Ser | Ile | Asn | Glu | Val | Ser | Thr | Phe | Tyr | Ile | Ile | Lys | Glu | Asp | Thr | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Ile | Ala | Met | Gly | Gly | Ala | Gln | Ile | Met | Leu | Gly | Leu | Ile | His | Asn | Ala | |
| | | | 165 | | | | | | 170 | | | | | 175 | | |
| Leu | Gly | Thr | Leu | Trp | Leu | Ser | Leu | His | Asn | Leu | Glu | Asp | Lys | Arg | Tyr | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| Ser | Ile | Gly | His | Lys | Leu | Met | Leu | Ala | Ser | Ile | Cys | Tyr | Leu | Phe | Val | |
| | | 195 | | | | | 200 | | | | | 205 | | | | |
| Ser | Gly | Thr | Phe | Phe | Ile | Asn | Ser | Gly | Ser | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | | |

<210> 211

<211> 630

<212> DNA

<213> Mus musculus

<400> 211

| | | | | | | |
|------------|-------------|-------------|------------|-------------|------------|-----|
| gaattcgcg | cccgcgtcg | cgtcactgtg | gagctcagat | cacagtgtctg | acagaatcca | 60 |
| tatttgga | attacataag | gtttgaaaga | gaggatagtg | aaaggatacg | aattcctaaa | 120 |
| aacgtttaat | ctggcctttt | gtttgaacga | aagagaaatt | gaaaccaa | gaaataaatt | 180 |
| acttgtaga | aagaatactg | ccaacagcat | agcaaaatga | aattcttcct | gctgctttcc | 240 |
| ctcattggat | tctgctgggc | ccaatatgac | ccacatactc | aatatggacg | aactgctatt | 300 |
| gtccacctgt | ttgagtggcg | ctgggttgat | attgctaagg | aatgtgagag | atacttagct | 360 |
| cctaattgat | ttgcaggtgt | gcaggtctct | ccacccaatg | aaaacatcgt | agtccacagc | 420 |
| ccttcaagac | catggtggga | aagatatcaa | ccaattagct | acaaaatatg | ttccaggtct | 480 |
| ggaaatgaag | atgaattcag | ggacatgggtg | aacaggtgca | acaatgttgg | tgtccgtatt | 540 |
| tatgtggatg | ctgtcattaa | ccacatgtgt | ggagtggggg | ctcaagctgg | acaaagcagt | 600 |
| acatgtggaa | gttatattcaa | ccccgatcc | | | | 630 |

<210> 212

<211> 205

<212> PRT

<213> Mus musculus

<400> 212

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Glu | Phe | Ala | Ala | Arg | Val | Asp | Val | Thr | Val | Glu | Leu | Arg | Ser | Gln | Cys | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Gln | Asn | Pro | Tyr | Leu | Glu | Asn | Tyr | Ile | Arg | Phe | Glu | Arg | Glu | Asp | Ser | |
| | | 20 | | | | | | 25 | | | | | 30 | | | |
| Glu | Arg | Ile | Arg | Ile | Pro | Lys | Asn | Val | Ser | Gly | Leu | Leu | Phe | Glu | Arg | |
| | 35 | | | | | | 40 | | | | | 45 | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Arg | Asn | Asn | Gln | Met | Lys | Ile | Thr | Cys | Lys | Glu | Tyr | Cys | Gln | Gln |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| His | Ser | Lys | Met | Lys | Phe | Phe | Leu | Leu | Leu | Ser | Leu | Ile | Gly | Phe | Cys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Trp | Ala | Gln | Tyr | Asp | Pro | His | Thr | Gln | Tyr | Gly | Arg | Thr | Ala | Ile | Val |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| His | Leu | Phe | Glu | Trp | Arg | Trp | Val | Asp | Ile | Ala | Lys | Glu | Cys | Glu | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Tyr | Leu | Ala | Pro | Asn | Gly | Phe | Ala | Gly | Val | Gln | Val | Ser | Pro | Pro | Asn |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Glu | Asn | Ile | Val | Val | His | Ser | Pro | Ser | Arg | Pro | Trp | Trp | Glu | Arg | Tyr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Gln | Pro | Ile | Ser | Tyr | Lys | Ile | Cys | Ser | Arg | Ser | Gly | Asn | Glu | Asp | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Phe | Arg | Asp | Met | Val | Asn | Arg | Cys | Asn | Asn | Val | Gly | Val | Arg | Ile | Tyr |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Val | Asp | Ala | Val | Ile | Asn | His | Met | Cys | Gly | Val | Gly | Ala | Gln | Ala | Gly |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Gln | Ser | Ser | Thr | Cys | Gly | Ser | Tyr | Phe | Asn | Pro | Gly | Ser | | | |
| | | 195 | | | | | 200 | | | | | 205 | | | |

<210> 213
 <211> 370
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (337)...(337)
 <223> n = A, C, G or T

<400> 213
 gaattcgcgg cgcgctcgac gtaaaaggcc taggagattt gttgatccaa taaatatgat 60
 tagggaaaca attattaggg ttcattgttcg tccttttggg gtgtggatta gcattatttg 120
 tttgataata agtttaacta gctggttggg ggttttgcgg tcggccgaga agacggcact 180
 gctgcaggat gggaagagga tgggtgcacta tttgttccca gacgggaagg aaatggcaga 240
 agaatatgac gagaagacca gtgaactcct tgtgaggaag tggcgtgtga aaaatgccct 300
 gggagccttg ggccagtggc agcttgaagt gggagancca gtgccctcag gagctgggag 360
 cctgggatcc 370

<210> 214
 <211> 123
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (112)...(112)
 <223> Xaa = any amno acid

<400> 214

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Arg | Lys | Arg | Pro | Arg | Arg | Phe | Val | Asp | Pro |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ile | Asn | Met | Ile | Arg | Glu | Thr | Ile | Ile | Arg | Val | His | Val | Arg | Pro | Phe |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Gly | Val | Trp | Ile | Ser | Ile | Ile | Cys | Leu | Ile | Ile | Ser | Leu | Thr | Ser | Trp |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Leu | Glu | Val | Leu | Arg | Ser | Ala | Glu | Lys | Thr | Ala | Leu | Leu | Gln | Asp | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Lys | Arg | Met | Val | His | Tyr | Leu | Phe | Pro | Asp | Gly | Lys | Glu | Met | Ala | Glu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Glu | Tyr | Asp | Glu | Lys | Thr | Ser | Glu | Leu | Leu | Val | Arg | Lys | Trp | Arg | Val |
| | | | | 85 | | | | 90 | | | | | | 95 | |
| Lys | Asn | Ala | Leu | Gly | Ala | Leu | Gly | Gln | Trp | Gln | Leu | Glu | Val | Gly | Xaa |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Pro | Val | Pro | Ser | Gly | Ala | Gly | Ser | Leu | Gly | Ser | | | | | |
| | | 115 | | | | | 120 | | | | | | | | |

<210> 215

<211> 508

<212> DNA

<213> Mus musculus

<400> 215

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| gaattcgcg | ccgcgtcgac | gagatcgaga | aattcgataa | gtcgaagttg | aagaaaacag | 60 |
| aaacgcaaga | gaaaaatcct | ctgccttcaa | aagaaacaat | tgaacaagag | aagcaagctg | 120 |
| gcgaatcgta | atgaggcgag | cgccgccaat | atgcactgta | cattccacga | gcattgcctt | 180 |
| cttattttac | ttcttttagc | tgtttaactt | tgtaagatgc | aaagagggtg | gatcaagttt | 240 |
| aaatgactgt | gctgcccctt | tcacatcaaa | gaatcagaac | tactgagcag | gaaggcctcc | 300 |
| cctgcctctc | ccacccatct | gatggtcttg | ctagcagaga | gggaaaagaa | cttgcattgt | 360 |
| ggtgaaggaa | aaagctgggt | gggagatgat | gaaatagaga | ggaaaattca | agatgggtcaa | 420 |
| agatgtcctg | caggatgtaa | aatgcagttt | aatcagagtg | ccattttttt | ttgttcaaac | 480 |
| aattttaatt | attggaatgc | acggatcc | | | | 508 |

<210> 216

<211> 162

<212> PRT

<213> Mus musculus

<400> 216

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Pro | Arg | Arg | Arg | Asp | Arg | Glu | Ile | Arg | Val | Glu | Val | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Glu | Asn | Arg | Asn | Ala | Arg | Glu | Lys | Ser | Ser | Ala | Phe | Lys | Arg | Asn | Asn |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Thr | Arg | Glu | Ala | Ser | Trp | Arg | Ile | Val | Met | Arg | Arg | Ala | Pro | Pro | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Cys | Thr | Val | His | Ser | Thr | Ser | Ile | Ala | Phe | Leu | Phe | Tyr | Phe | Phe | Leu |
| | 50 | | | | | 55 | | | | 60 | | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Asn | Phe | Val | Arg | Cys | Lys | Glu | Val | Gly | Ser | Ser | Leu | Asn | Asp | Cys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ala | Ala | Pro | Phe | Thr | Ser | Lys | Asn | Gln | Asn | Tyr | Ala | Gly | Arg | Pro | Pro |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Leu | Pro | Leu | Pro | Pro | Ile | Trp | Ser | Gly | Gln | Arg | Gly | Lys | Arg | Thr | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Met | Leu | Val | Lys | Glu | Lys | Ala | Gly | Trp | Glu | Met | Met | Lys | Arg | Gly | Lys |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Phe | Lys | Met | Val | Lys | Asp | Val | Leu | Gln | Asp | Val | Lys | Cys | Ser | Leu | Ile |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | Val | Pro | Phe | Phe | Phe | Val | Gln | Thr | Ile | Leu | Ile | Ile | Gly | Met | His |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gly | Ser | | | | | | | | | | | | | | |

<210> 217
 <211> 920
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (2)...(302)
 <223> n = A, C, G or T

<400> 217

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| tnntngaattc | cccagttaan | agaattttggc | ccaataggnc | cccgggaccg | gtntnggnngg | 60 |
| antcgaatgtt | gccaaaccag | gntcncaang | ttttgtaacc | cngaagatga | ggaggactac | 120 |
| tnntttttcgg | aagccttaag | gcatnaacgt | cagacagnaa | naaagtgtcc | aagtgggact | 180 |
| gccgntcttc | taccaatccc | agccgaagaa | tgctcctgtg | accttcattg | tgnatgganc | 240 |
| agtagtgaaa | tttgcccaag | gcttgggaaa | nccaatatat | atactcagaa | ccaagagcct | 300 |
| cntaagaagg | tatgatgacc | aaaaggacta | aagacatggg | caagttcagc | tctgttactg | 360 |
| tgtctaccca | ttgatgaaga | agaagaggag | atagaggcta | gggaagttgc | tgactcttac | 420 |
| gcgcagaatg | ccaaagtgat | tgaaaagcag | ctggagcgca | aaggcatgag | caagaggagg | 480 |
| ctgcaggagt | tggctgaatt | ggaagccaag | aaagcaaaaa | tgaaggggac | cctgatcgac | 540 |
| aatcagttca | aataatcaag | atctttcttg | gttcagactg | gaggcagcag | ttagatgagg | 600 |
| aagagtagct | tcaagatgtg | ttttcgtttc | tgtttctccc | agaagggttt | tctgaccatc | 660 |
| ctattggttt | tctgacactt | tttcttttct | tccattgaag | tccttgactc | catttcactt | 720 |
| gctttctagg | aggtagattg | tttgtaaaat | ctctgtatat | atgttttctg | tctttcttgt | 780 |
| ctttgagatc | aggtcttggt | acataccaga | gtatggcctt | gaactttgtg | agcctcctct | 840 |
| cctgtcttag | tctctctctc | tctctctctc | tctctctctc | tctctctctg | ctgaagttcc | 900 |
| aggaccacac | caccgatcc | | | | | 920 |

<210> 218
 <211> 291
 <212> PRT
 <213> Mus musculus

<220>

<221> UNSURE

<222> (1)...(85)

<223> Xaa = any amino acid

<400> 218

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Asn | Ser | Pro | Val | Xaa | Arg | Ile | Trp | Pro | Asn | Arg | Xaa | Pro | Gly | Pro |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Val | Xaa | Xaa | Xaa | Ser | Met | Leu | Pro | Asn | Gln | Xaa | Xaa | Xaa | Val | Leu | Pro |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Xaa | Arg | Gly | Gly | Leu | Leu | Xaa | Phe | Gly | Ser | Leu | Lys | Ala | Xaa | Thr | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Asp | Xaa | Xaa | Lys | Val | Ser | Lys | Trp | Asp | Cys | Arg | Ser | Ser | Thr | Asn | Pro |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Arg | Arg | Met | Leu | Leu | Pro | Ser | Leu | Xaa | Met | Xaa | Gln | Asn | Leu | Pro |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Lys | Ala | Trp | Glu | Xaa | Gln | Tyr | Ile | Tyr | Ser | Glu | Pro | Arg | Ala | Ser | Glu |
| | | | | 85 | | | | | 90 | | | | | | 95 |
| Gly | Met | Met | Thr | Lys | Arg | Thr | Lys | Asp | Met | Gly | Lys | Phe | Ser | Ser | Val |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Thr | Val | Ser | Thr | His | Arg | Arg | Arg | Gly | Asp | Arg | Gly | Gly | Ser | Cys | Leu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | Arg | Ala | Glu | Cys | Gln | Ser | Asp | Lys | Ala | Ala | Gly | Ala | Gln | Arg | His |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Glu | Gln | Glu | Glu | Ala | Ala | Gly | Val | Gly | Ile | Gly | Ser | Gln | Glu | Ser | Lys |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Asn | Glu | Gly | Asp | Pro | Asp | Arg | Gln | Ser | Val | Gln | Ile | Ile | Lys | Ile | Phe |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Leu | Gly | Ser | Asp | Trp | Arg | Gln | Gln | Leu | Asp | Glu | Glu | Glu | Leu | Gln | Asp |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Val | Phe | Ser | Phe | Leu | Phe | Leu | Pro | Glu | Gly | Phe | Ser | Asp | His | Pro | Ile |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Gly | Phe | Leu | Thr | Leu | Phe | Leu | Phe | Phe | His | Ser | Pro | Leu | His | Phe | Thr |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Cys | Phe | Leu | Gly | Gly | Arg | Leu | Phe | Val | Lys | Ser | Leu | Tyr | Ile | Cys | Phe |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Leu | Ser | Phe | Leu | Ser | Leu | Arg | Ser | Gly | Leu | Val | Thr | Tyr | Gln | Ser | Met |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Ala | Leu | Asn | Phe | Val | Ser | Leu | Leu | Ser | Cys | Leu | Ser | Leu | Ser | Leu | Ser |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Leu | Ser | Leu | Ser | Leu | Ser | Leu | Ser | Leu | Leu | Lys | Phe | Gln | Asp | His | Thr |
| | | 275 | | | | | 280 | | | | | | 285 | | |
| Thr | Gly | Ser | | | | | | | | | | | | | |
| | | 290 | | | | | | | | | | | | | |

<210> 219

<211> 400

<212> DNA

<213> Mus musculus

<220>
 <221> unsure
 <222> (38)...(41)
 <223> n = A, C, G or T

<400> 219
 gaattcgcgg ccgcgtcgac tttttttttt tttttttntn ntttgatttt tccaagataa 60
 aactttattg gagacagcaa ggagtatact gaaagtgggg gagccatgcc ttcattccat 120
 aactgcaatc agatgctctc ctctgagaga gagtgtgtgg ggagccaagg tgagaagcag 180
 gtatgattca caccccaact gcttggagag tgcttatatg acagtctttt tctcgatttt 240
 attttttctc agttcttcaa cacacacttt ggcttcattt gggggaaaat taaacaaaag 300
 aacagaattt ccctcccca gagttactta tgaaatgaca cagctgccct tttctttgaa 360
 gggattcttg tcttctggga ttccctttac cagaggatcc 400

<210> 220
 <211> 132
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (13)...(14)
 <223> Xaa = any amino acid

<400> 220
 Asn Ser Arg Pro Arg Arg Leu Phe Phe Phe Phe Phe Xaa Xaa Phe Phe
 1 5 10 15
 Gln Asp Lys Thr Leu Leu Glu Thr Ala Arg Ser Ile Leu Lys Val Gly
 20 25 30
 Glu Pro Cys Leu His Ser Ile Thr Ala Ile Arg Cys Ser Pro Leu Arg
 35 40 45
 Glu Ser Val Trp Gly Ala Lys Val Arg Ser Arg Tyr Asp Ser His Pro
 50 55 60
 Asn Cys Leu Glu Ser Ala Tyr Met Thr Val Phe Ser Ile Leu Phe
 65 70 75 80
 Phe Leu Ser Ser Ser Thr His Thr Leu Ala Ser Phe Gly Gly Lys Leu
 85 90 95
 Asn Lys Arg Thr Glu Phe Pro Ser Pro Arg Val Thr Tyr Glu Met Thr
 100 105 110
 Gln Leu Pro Phe Ser Leu Lys Gly Phe Leu Ser Ser Gly Ile Pro Phe
 115 120 125
 Thr Arg Gly Ser
 130

<210> 221
 <211> 244
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (210)...(210)
 <223> n = A, C, G or T

<400> 221
 gaattcgcgg ccgcgtcgac ggagtccttct gactgctggt ggagcaggtc tcaggaatct 60
 cttcgcttca gcttcaatca tggcctgtgg tctggtcgcc agcaacctga atctcaaacc 120
 tggggaatgt ctcaaagttc ggggagaggt ggcctcggac gccaagagct ttgtgctgaa 180
 cctgggaaaa gacagcaaca acctgtgccn acacttcaat cctcgcttca atgcacatgg 240
 atcc 244

<210> 222
 <211> 81
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (70)...(70)
 <223> Xaa = any amino acid

<400> 222
 Asn Ser Arg Pro Arg Arg Arg Ser Leu Leu Thr Ala Gly Gly Ala Gly
 1 5 10 15
 Leu Arg Asn Leu Phe Ala Ser Ala Ser Ile Met Ala Cys Gly Leu Val
 20 25 30
 Ala Ser Asn Leu Asn Leu Lys Pro Gly Glu Cys Leu Lys Val Arg Gly
 35 40 45
 Glu Val Ala Ser Asp Ala Lys Ser Phe Val Leu Asn Leu Gly Lys Asp
 50 55 60
 Ser Asn Asn Leu Cys Xaa His Phe Asn Pro Arg Phe Asn Ala His Gly
 65 70 75 80
 Ser

<210> 223
 <211> 142
 <212> DNA
 <213> Mus musculus

<400> 223
 gaattcgcgg ccgcgtcgac gttcattatt tttggttggt tgtcttgggt tagcattaaa 60
 gccttcacct atttatggag gtttaggttt aattgttagt gggtttggtg gttgtttaat 120
 ggttttaggg tttggtggat cc 142

<210> 224
 <211> 55
 <212> PRT

<210> 227
 <211> 480
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (21)...(36)
 <223> n = A, C, G or T

<400> 227
 gaattcgcgg ccgcgtcgac nttttttttt ttttntttt tttttttttt tttttttttt 60
 ttttaagaaca actgaacata tgttgtgtgt accgggcata aaggatgaat gggcccttta 120
 gttaaccac tgcttgata acatgacact tagtcactt ccatctctcc ggagtcggtg 180
 tgctgtgagc ttcctttggg tggatctggg ctggctctctg aaccactctg tccgtccatt 240
 ggtccattgt gctcactacc agtttttgct ttgtcttcag gagcttctac ttttggtttg 300
 ggcttataaaa cgatgggggtt acagaaatta tccagttcct ttgactttgt aactatttct 360
 gacactttta ccacgggatc ttgagtgaga ctttaatttat tctgtgcatt catcttactg 420
 tttagccagt tcatggagtc actgatgtac ttttcaactc tttccatttc agcaggatcc 480

<210> 228
 <211> 154
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (12)...(12)
 <223> Xaa = any amino acid

<400> 228
 Glu Phe Ala Ala Ala Ser Thr Phe Phe Phe Phe Xaa Phe Phe Phe Phe
 1 5 10 15
 Phe Phe Phe Phe Phe Lys Asn Asn Thr Tyr Val Val Cys Thr Gly His
 20 25 30
 Lys Gly Met Gly Pro Leu Val Asn Pro Leu Leu Gly His Asp Thr Ser
 35 40 45
 Thr Ser Ile Ser Pro Glu Ser Val Cys Cys Glu Leu Pro Leu Gly Gly
 50 55 60
 Ser Gly Leu Val Ser Glu Pro Leu Cys Pro Ser Ile Gly Pro Leu Cys
 65 70 75 80
 Ser Leu Pro Val Phe Ala Leu Ser Ser Gly Ala Ser Thr Phe Gly Leu
 85 90 95
 Gly Leu Thr Met Gly Leu Gln Lys Leu Ser Ser Ser Phe Asp Phe Val
 100 105 110
 Thr Ile Ser Asp Thr Phe Thr Thr Gly Ser Val Arg Leu Asn Leu Phe

| | | | | | |
|-----|---------------------|---------------------|---------------------|--|-----|
| | 115 | | 120 | | 125 |
| Cys | Ala Phe Ile Leu Leu | Phe Ser Gln Phe Met | Glu Ser Leu Met Tyr | | |
| | 130 | 135 | 140 | | |
| Phe | Ser Thr Leu Ser Ile | Ser Ala Gly Ser | | | |
| 145 | 150 | | | | |

<210> 229
 <211> 420
 <212> DNA
 <213> Mus musculus

<400> 229

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gaattcgcgg | ccgcgtcgac | tttttttttt | tttttttttt | tttttttttt | tttttttttt | 60 |
| ttttgatttt | tccaagataa | aactttattg | gagacagcaa | ggagtatact | gaaagtgggg | 120 |
| gagccatgcc | ttcattccat | aactgcaatc | agatgctctc | ctctgagaga | gagtgtgtgg | 180 |
| ggagccaagg | tgagaagcag | gtatgattca | caccccaact | gcttggagag | tgcttatatg | 240 |
| acagtctttt | tctcgatttt | attttttctc | agttcttcaa | cacacacttt | ggcttcattt | 300 |
| gggggaaaat | taaacaaaag | aacagaattt | ccctcccca | gagttactta | tgaaatgaca | 360 |
| cagctgccct | tttctttgaa | gggattcttg | tcttctggga | ttccctttac | cagaggatcc | 420 |

<210> 230
 <211> 139
 <212> PRT
 <213> Mus musculus

<400> 230

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Phe | Ala | Ala | Ala | Ser | Thr | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe | Phe |
| 1 | | | 5 | | | | | 10 | | | | | 15 | | |
| Phe | Phe | Phe | Phe | Phe | Phe | Phe | Gln | Asp | Lys | Thr | Leu | Leu | Glu | Thr | Ala |
| | | 20 | | | | | 25 | | | | | | 30 | | |
| Arg | Ser | Ile | Leu | Lys | Val | Gly | Glu | Pro | Cys | Leu | His | Ser | Ile | Thr | Ala |
| | 35 | | | | | 40 | | | | | 45 | | | | |
| Ile | Arg | Cys | Ser | Pro | Leu | Arg | Glu | Ser | Val | Trp | Gly | Ala | Lys | Val | Arg |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Ser | Arg | Tyr | Asp | Ser | His | Pro | Asn | Cys | Leu | Glu | Ser | Ala | Tyr | Met | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Val | Phe | Phe | Ser | Ile | Leu | Phe | Phe | Leu | Ser | Ser | Ser | Thr | His | Thr | Leu |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Ala | Ser | Phe | Gly | Gly | Lys | Leu | Asn | Lys | Arg | Thr | Glu | Phe | Pro | Ser | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Arg | Val | Thr | Tyr | Glu | Met | Thr | Gln | Leu | Pro | Phe | Ser | Leu | Lys | Gly | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | Ser | Ser | Gly | Ile | Pro | Phe | Thr | Arg | Gly | Ser | | | | | |
| 130 | | | | | | 135 | | | | | | | | | |

<210> 231
 <211> 629

<212> DNA

<213> Mus musculus

<400> 231

```
gaattcgcgg cgcgctcgac gtcactgtgg agctcagatc acagtgctga cagaatccat 60
at ttggagaa ttacataagg tttgaaagag aggatagtg aaggatacga attcctaaaa 120
acgtttaatc tggccttttg tttgaacgaa agagaaattg aaaccaaattg aaataaatta 180
cttgtagtaa agaatactgc caacagcata gcaaaatgaa attcttcctg ctgctttccc 240
tcattggatt ctgctgggcc caatatgacc cacatactca atatggacga actgctattg 300
tccacctgtt tgagtggcgc tgggttgata ttgctaagga atgtgagaga tacttagctc 360
ctaattggatt tgcaggtgtg caggtctctc cacccaatga aaacatcgta gtccacagcc 420
cttcaagacc atggtgggaa agatatcaac caattagcta caaaatatgt tccaggtctg 480
gaaatgaaga tgaattcagg gacatgggtga acaggtgcaa caatggttgg gtccgtatgt 540
atgtggatgc tgtcattaac cacatgtgtg gagtgggggc tcaagctgga caaagcagta 600
catgtggaag ttatttcaac cccgatcc 629
```

<210> 232

<211> 204

<212> PRT

<213> Mus musculus

<400> 232

```
Ile Arg Gly Arg Val Asp Val Thr Val Glu Leu Arg Ser Gln Cys Gln
 1          5          10          15
Asn Pro Tyr Leu Glu Asn Tyr Ile Arg Phe Glu Arg Glu Asp Ser Glu
 20          25          30
Arg Ile Arg Ile Pro Lys Asn Val Ser Gly Leu Leu Phe Glu Arg Lys
 35          40          45
Arg Asn Asn Gln Met Lys Ile Thr Cys Lys Glu Tyr Cys Gln Gln His
 50          55          60
Ser Lys Met Lys Phe Phe Leu Leu Leu Ser Leu Ile Gly Phe Cys Trp
 65          70          75          80
Ala Gln Tyr Asp Pro His Thr Gln Tyr Gly Arg Thr Ala Ile Val His
 85          90          95
Leu Phe Glu Trp Arg Trp Val Asp Ile Ala Lys Glu Cys Glu Arg Tyr
100          105          110
Leu Ala Pro Asn Gly Phe Ala Gly Val Gln Val Ser Pro Pro Asn Glu
115          120          125
Asn Ile Val Val His Ser Pro Ser Arg Pro Trp Trp Glu Arg Tyr Gln
130          135          140
Pro Ile Ser Tyr Lys Ile Cys Ser Arg Ser Gly Asn Glu Asp Glu Phe
145          150          155          160
Arg Asp Met Val Asn Arg Cys Asn Asn Val Gly Val Arg Ile Tyr Val
165          170          175
Asp Ala Val Ile Asn His Met Cys Gly Val Gly Ala Gln Ala Gly Gln
180          185          190
Ser Ser Thr Cys Gly Ser Tyr Phe Asn Pro Gly Ser
195          200
```

<210> 233
 <211> 254
 <212> DNA
 <213> Mus musculus

<400> 233
 gaattcgcgg ccgcgtcgac ggatttttct tgagaaaatc ttgggtgaga ttattctgga 60
 ttctatttaa atgtgtgtat ataatgat,ta ggatttttatt ttacagtca tatctacttc 120
 cttccttatg tgcgaaatct attgcaacat attatgcacc atactcaa,at ccctgggtgtt 180
 ccagccaagg ttcttgggtt tcaccacagt acagtaatgt gactccaata ccagaaggaa 240
 agaatgtggg atcc 254

<210> 234
 <211> 84
 <212> PRT
 <213> Mus musculus

<400> 234
 Ile Arg Gly Arg Val Asp Gly Phe Phe Leu Arg Lys Ser Trp Val Arg
 1 5 10 15
 Leu Phe Trp Ile Leu Phe Lys Cys Val Tyr Ile Met Ile Arg Ile Leu
 20 25 30
 Phe Leu Gln Ser Tyr Leu Leu Pro Ser Leu Cys Ala Lys Ser Ile Ala
 35 40 45
 Thr Tyr Tyr Ala Pro Tyr Ser Asn Pro Trp Cys Ser Ser Gln Gly Ser
 50 55 60
 Trp Val Ser Pro Gln Tyr Ser Asn Val Thr Pro Ile Pro Glu Gly Lys
 65 70 75 80
 Asn Val Gly Ser

<210> 235
 <211> 660
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (10)...(165)
 <223> n = A, C, G or T

<400> 235
 gtcacccaan actgcggcat tatgaggaca ttatgacgaa ataagggttaa aaaagaagtg 60
 aagaacagtt ggggtccagtg gcgaaganac acggccaggn tggcaaaana gtgcagcggc 120
 acaggccgat tggaaaccgac atgaggatct acgcaaccga ctcggn,ag,at accgcaacga 180
 ggtgcacacc atgctgggcc agagcacaga gaagatacgg gcgcggctct ccacacacct 240
 gcgcaagatg cgcaagcgct tgatgcggga tgccgaggat ctgcagaagc gcctagctgt 300
 gtacaagcag gggcacgcga gggcgccgag cgcggtgtga gtgccatccg tgagcgcc,tg 360
 gggcctctgg tggagcaagg tcgccagcgc accgccaacc taggcgctgg ggccgcccag 420

```

cctctgcgcg atcgcgcccc ggcttttggg gaccgcatcc gagggcggct ggaggaagtg 480
ggcaaccagg cccgtgaccg cctagaggag gtgcgtgagc acatggagga ggtgcgctcc 540
aagatggagg aactctcgag tcccagcatc agagcgcgtg gaccttttcc cgcgtcccgc 600
agcatgcagg tctcccgtgt gctggccgcg ctgtgcggca tgctactctg cgccggatcc 660

```

```

<210> 236
<211> 218
<212> PRT
<213> Mus musculus

```

```

<220>
<221> UNSURE
<222> (4)...(54)
<223> Xaa = any amino acid

```

```

<400> 236
Val Thr Gln Xaa Cys Gly Ile Met Arg Thr Leu Arg Asn Lys Val Lys
 1      5      10      15
Lys Glu Val Lys Asn Ser Trp Val Gln Trp Arg Arg Xaa Thr Ala Arg
      20      25      30
Xaa Ala Lys Xaa Cys Ser Gly Thr Gly Arg Leu Glu Pro Thr Gly Ser
      35      40      45
Thr Gln Pro Thr Arg Xaa Val Pro Gln Arg Gly Ala His His Ala Gly
      50      55      60
Pro Glu His Arg Glu Asp Thr Gly Ala Ala Leu His Thr Pro Ala Gln
      65      70      75      80
Asp Ala Gln Ala Leu Asp Ala Gly Cys Arg Gly Ser Ala Glu Ala Pro
      85      90      95
Ser Cys Val Gln Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Val Ser
      100      105      110
Ala Ile Arg Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Gln Arg
      115      120      125
Thr Ala Asn Leu Gly Ala Gly Ala Ala Gln Pro Leu Arg Asp Arg Ala
      130      135      140
Gln Ala Phe Gly Asp Arg Ile Arg Gly Arg Leu Glu Glu Val Gly Asn
      145      150      155      160
Gln Ala Arg Asp Arg Leu Glu Glu Val Arg Glu His Met Glu Glu Val
      165      170      175
Arg Ser Lys Met Glu Glu Leu Ser Ser Pro Ser Ile Arg Ala Arg Gly
      180      185      190
Pro Phe Pro Ala Ser Arg Ser Met Gln Val Ser Arg Val Leu Ala Ala
      195      200      205
Leu Cys Gly Met Leu Leu Cys Ala Gly Ser
      210      215

```

```

<210> 237
<211> 519
<212> DNA

```

<213> Mus musculus

<400> 237

```
cctgcaggag atatatccag agctgcagat cacaaatgtg atgaagcaaa ccagccagtc 60
aatattgata gttggtgccg aagggacaaa aggcagtgcag agagtcacat tggtatacca 120
ttcaagtgtc ttgtgggtga atttgtaagt gatgtcctgc tagttccaga taactgccag 180
tttttccacc aagagcggat ggaggtgtgt gagaagcacc agcgctggca cacgttagtc 240
aaggaggcat gtctgactga ggggctgacc ttatatagct atggcatgct gctgccctgc 300
ggggtagacc agttccatgg caccgagtat gtgtgctgcc ctcagacaaa gactgttgac 360
tcggactcga ctatgtccaa agaagaggag gaagaggaag aggatgaaga ggacgaagag 420
gaagactatg atcttgataa aagtgaattt cctactgaag cagatttgga agacttcaca 480
gaagcagcag cagatgagga agaagaggat gagggatcc 519
```

<210> 238

<211> 173

<212> PRT

<213> Mus musculus

<400> 238

```
Pro Ala Gly Asp Ile Ser Arg Ala Ala Asp His Lys Cys Asp Glu Ala
 1           5           10           15
Asn Gln Pro Val Asn Ile Asp Ser Trp Cys Arg Arg Asp Lys Arg Gln
          20           25           30
Cys Lys Ser His Ile Val Ile Pro Phe Lys Cys Leu Val Gly Glu Phe
          35           40           45
Val Ser Asp Val Leu Leu Val Pro Asp Asn Cys Gln Phe Phe His Gln
          50           55           60
Glu Arg Met Glu Val Cys Glu Lys His Gln Arg Trp His Thr Leu Val
65           70           75           80
Lys Glu Ala Cys Leu Thr Glu Gly Leu Thr Leu Tyr Ser Tyr Gly Met
          85           90           95
Leu Leu Pro Cys Gly Val Asp Gln Phe His Gly Thr Glu Tyr Val Cys
          100          105          110
Cys Pro Gln Thr Lys Thr Val Asp Ser Asp Ser Thr Met Ser Lys Glu
          115          120          125
Glu Glu Glu Glu Glu Glu Asp Glu Glu Asp Glu Glu Glu Asp Tyr Asp
          130          135          140
Leu Asp Lys Ser Glu Phe Pro Thr Glu Ala Asp Leu Glu Asp Phe Thr
145          150          155          160
Glu Ala Ala Ala Asp Glu Glu Glu Glu Asp Glu Gly Ser
          165          170
```

<210> 239

<211> 678

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (9)...(160)

<223> n = A, C, G or T

<400> 239

```
gtggcccant cgggcccntg cccagtgngt ggctccngct ggcacgccag cggccttgga 60
agaagctcaa gcccattgagg ccggcgcgcc ntgccgccgg tgcaaaagag acggagctcc 120
cggccccccg ggggtggagcg ggggatcaat gcgggttcagn aatcgattcc agcgtttcat 180
gaaccatcgg gccccagtaa tggccgctac aaaccaacgt gctacgaaca tgctgccaat 240
tgctacacac acgcattcct cattgttccg gccattgtgg gcagtgccct cctccatcgg 300
ctgtctgatg actgctggga gaagataaca gcatggatct acgggatggg cctttgtgcc 360
ctcttcatcg tctccacagt gtttcacata gtatcatgga agaagagcca cttgagaaca 420
gtggagcatt gtttccacat gtgcgatcgg atgggtcatct acttcttcat tgctgcttcc 480
tacgccccat gggttaaact ccgatgaact ggacccctgg catctcatat gcgttggttt 540
atctggctca tggcagctgg aggaaccatt tatgtatttc tctaccatga aaagtataaa 600
gtggttgaac ttttcttcta tctcacgatg ggattttctc cagccttggg ggtgacatca 660
atgaataaca ctggatcc 678
```

<210> 240

<211> 225

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (3)...(53)

<223> Xaa = any amino acid

<400> 240

```
Val Ala Xaa Ser Gly Pro Cys Pro Val Xaa Gly Ser Xaa Trp His Ala
 1          5          10          15
Ser Gly Leu Gly Arg Ser Ser Ser Pro Gly Arg Arg Ala Xaa Pro Pro
 20          25          30
Val Gln Lys Arg Arg Ser Ser Arg Pro Pro Arg Val Glu Arg Gly Ile
 35          40          45
Asn Ala Val Gln Xaa Ser Ile Pro Ala Phe His Glu Pro Ser Gly Pro
 50          55          60
Ser Asn Gly Arg Tyr Lys Pro Thr Cys Tyr Glu His Ala Ala Asn Cys
 65          70          75          80
Tyr Thr His Ala Phe Leu Ile Val Pro Ala Ile Val Gly Ser Ala Leu
 85          90          95
Leu His Arg Leu Ser Asp Asp Cys Trp Glu Lys Ile Thr Ala Trp Ile
 100          105          110
Tyr Gly Met Gly Leu Cys Ala Leu Phe Ile Val Ser Thr Val Phe His
 115          120          125
Ile Val Ser Trp Lys Lys Ser His Leu Arg Thr Val Glu His Cys Phe
 130          135          140
His Met Cys Asp Arg Met Val Ile Tyr Phe Phe Ile Ala Ala Ser Tyr
 145          150          155          160
Ala Pro Trp Leu Asn Leu Arg Glu Leu Gly Pro Leu Ala Ser His Met
 165          170          175
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Trp | Phe | Ile | Trp | Leu | Met | Ala | Ala | Gly | Gly | Thr | Ile | Tyr | Val | Phe |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Tyr | His | Glu | Lys | Tyr | Lys | Val | Val | Glu | Leu | Phe | Phe | Tyr | Leu | Thr |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Met | Gly | Phe | Ser | Pro | Ala | Leu | Val | Val | Thr | Ser | Met | Asn | Asn | Thr | Gly |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ser | | | | | | | | | | | | | | | |
| 225 | | | | | | | | | | | | | | | |

<210> 241
 <211> 655
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (16)...(85)
 <223> n = A, C, G or T

| | | | | | |
|------------|------------|-------------|------------|------------|-----------------|
| <400> 241 | | | | | |
| gttgtagatc | tgaaancaag | aaagaaggcg | gggcttgagg | tcctgaggtc | acttaagggc 60 |
| caccntnttt | gacntaagac | ctcantaggc | ccgcctcta | aaggtttctg | acctcaatag 120 |
| gccttcctgg | agaactagtt | tctaactctc | aggcccttgg | gacattgcat | ctcagtagta 180 |
| ggtgcctctc | tacctgtgtt | tggcttggtc | atgattggca | gacactctgc | ctggctctgc 240 |
| acagcagcgg | ctcagcatca | gcattccagct | gcttgctgtg | tgtagttgt | ctcacagctg 300 |
| agggctctgc | ctcggctact | tcaggctttc | cggtaggaa | gataatttgg | tcacttgtgt 360 |
| ctgtggccac | tcttagaatt | ttctcttttg | agggaacctg | tgactggttg | gcttttgcac 420 |
| tctatggagg | gagatggggt | taaagactgt | ggcaacacac | accctccaga | agagctggga 480 |
| ccagagactg | tcagcacaga | aaggacaatg | tcttttttag | tagctgtggc | agacttgagt 540 |
| tgctgtaatt | tatacaaatt | gtttagaatg | gtttttaaga | ctaagaaggg | aaatataactt 600 |
| attgcacaag | acttttataa | ttactatact | taaattatgc | tctatgtggg | gatcc 655 |

<210> 242
 <211> 201
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (3)...(25)
 <223> Xaa = any amino acid

| | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 242 | | | | | | | | | | | | | | | |
| Leu | Ile | Xaa | Gln | Glu | Arg | Arg | Arg | Gly | Leu | Arg | Ser | Gly | His | Leu | Arg |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Ala | Thr | Xaa | Phe | Asp | Xaa | Arg | Pro | Xaa | Ala | Pro | Pro | Leu | Lys | Val | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Asp | Leu | Asn | Arg | Pro | Ser | Trp | Arg | Thr | Ser | Phe | Leu | Ser | Gly | Pro | Trp |
| | | 35 | | | | | 40 | | | | | 45 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ile | Ala | Ser | Gln | Val | Pro | Leu | Tyr | Leu | Cys | Leu | Ala | Cys | Ser | Leu |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Ala | Asp | Thr | Leu | Pro | Gly | Ser | Ala | Gln | Gln | Arg | Leu | Ser | Ile | Ser | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Gln | Leu | Leu | Ala | Val | Cys | Leu | Ser | His | Ser | Gly | Leu | Cys | Leu | Gly | Tyr |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Phe | Arg | Leu | Ser | Gly | Glu | Asp | Asn | Leu | Val | Thr | Cys | Val | Cys | Gly | His |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ser | Asn | Phe | Leu | Phe | Gly | Asn | Leu | Leu | Val | Gly | Phe | Cys | Ile | Leu | Trp |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Arg | Glu | Met | Gly | Leu | Lys | Thr | Val | Ala | Thr | His | Thr | Leu | Gln | Lys | Ser |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Trp | Asp | Gln | Arg | Leu | Ser | Ala | Gln | Lys | Gly | Gln | Cys | Leu | Phe | Leu | Trp |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gln | Thr | Val | Ala | Val | Ile | Tyr | Thr | Asn | Cys | Leu | Glu | Trp | Phe | Leu | Arg |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Leu | Arg | Arg | Glu | Ile | Tyr | Leu | Leu | His | Lys | Thr | Phe | Ile | Ile | Thr | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Lys | Leu | Cys | Ser | Met | Trp | Gly | Ser | | | | | | | |
| | 195 | | | | | | 200 | | | | | | | | |

<210> 243
 <211> 677
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (1)...(1)
 <223> n = A, C, G or T

<400> 243

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| ncgctgtagt | ttcattttctc | acttttgaggg | cacagatgaa | aatgtatatc | gcaacacagt | 60 |
| ggatatcagc | ccaagcacga | agaccatgct | gaacatgcac | ccgtacagag | tgtacttaaa | 120 |
| ggagtcgtca | taagggcact | gggagccatt | ggagcttacc | attgtcaggc | agtgcagctt | 180 |
| acaggaggcc | ttttgtccgc | agcgcttgat | cgatcgcctt | tgctattcag | atgtggtcac | 240 |
| agcagcagcc | agtttatattg | caaagtatth | gtttcttttc | ctgttcttac | aaatactttc | 300 |
| ttctcttaac | tcttcaaagg | aaacatgaaa | tgtgttccgt | aaaagtttct | agtagattat | 360 |
| tcaggaaaat | agtctgattt | tctggtcgag | aaaatccatg | agtctggagt | ttagttaact | 420 |
| gacagaaaat | gcagtcaagg | aagccaaccc | ataaagctga | aagtgtaagg | aaaaactggt | 480 |
| ccaagtcgga | ccagaccagt | ccgcgtggaa | acttgtgctt | cagccgccag | ggtccaaacc | 540 |
| agctttactt | cagtcacaaa | cactcgccgt | gcgtccgtcc | gcccgtcgtc | ctcgggtact | 600 |
| tcttccttct | ttttattctc | aaactttgta | tttctacatt | gattccggac | ggcgataggc | 660 |
| agtcgtttaa | gggatcc | | | | | 677 |

<210> 244
 <211> 219
 <212> PRT
 <213> Mus musculus

<400> 244

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Ala | Val | Val | Ser | Phe | Leu | Thr | Leu | Arg | Ala | Gln | Met | Lys | Met | Tyr | Ile | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | |
| Ala | Thr | Gln | Trp | Ile | Ser | Ala | Gln | Ala | Arg | Arg | Pro | Cys | Thr | Cys | Thr | |
| | | 20 | | | | | | 25 | | | | | 30 | | | |
| Arg | Thr | Glu | Cys | Thr | Arg | Ser | Arg | His | Lys | Gly | Thr | Gly | Ser | His | Trp | |
| | | 35 | | | | | 40 | | | | | 45 | | | | |
| Ser | Leu | Pro | Leu | Ser | Gly | Ser | Ala | Ala | Tyr | Arg | Arg | Pro | Phe | Val | Arg | |
| | 50 | | | | 55 | | | | | | 60 | | | | | |
| Ser | Ala | Ser | Ile | Ala | Phe | Ala | Ile | Gln | Met | Trp | Ser | Gln | Gln | Gln | Pro | |
| 65 | | | | 70 | | | | | 75 | | | | | | 80 | |
| Val | Tyr | Leu | Gln | Ser | Ile | Cys | Phe | Phe | Ser | Cys | Ser | Tyr | Lys | Tyr | Phe | |
| | | | | 85 | | | | | 90 | | | | | 95 | | |
| Leu | Leu | Leu | Thr | Leu | Gln | Arg | Lys | His | Glu | Met | Cys | Ser | Val | Lys | Val | |
| | | | 100 | | | | | 105 | | | | | 110 | | | |
| Ser | Ser | Arg | Leu | Phe | Arg | Lys | Ile | Val | Phe | Ser | Gly | Arg | Glu | Asn | Pro | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Val | Trp | Ser | Leu | Val | Asn | Gln | Lys | Met | Gln | Ser | Arg | Lys | Pro | Thr | His | |
| | 130 | | | | 135 | | | | | | 140 | | | | | |
| Lys | Ala | Glu | Ser | Val | Arg | Lys | Asn | Cys | Ser | Lys | Ser | Asp | Gln | Thr | Ser | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Pro | Arg | Gly | Asn | Leu | Cys | Phe | Ser | Arg | Gln | Gly | Pro | Asn | Gln | Leu | Tyr | |
| | | | | 165 | | | | | 170 | | | | | 175 | | |
| Phe | Ser | His | Lys | His | Ser | Pro | Cys | Val | Arg | Pro | Pro | Val | Val | Leu | Gly | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| Tyr | Phe | Phe | Leu | Leu | Phe | Ile | Leu | Lys | Leu | Cys | Ile | Ser | Thr | Leu | Ile | |
| | | 195 | | | | | 200 | | | | | 205 | | | | |
| Pro | Asp | Gly | Asp | Arg | Gln | Ser | Phe | Lys | Gly | Ser | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | | |

<210> 245

<211> 660

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (7)...(45)

<223> n = A, C, G or T

<400> 245

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| agagatncaa | tctaaaaagc | agatantgag | cagagactan | ggagnagtta | acatactaaa | 60 |
| ccgctacata | cataggacaa | atgccatttg | gaggctgaag | tcaaggaaac | atcagtatac | 120 |
| atgtaagttt | ggcattgtat | ttggttgcca | ttaaatggaa | agggcttttg | tactgagttg | 180 |
| agatcttata | tcctagataa | tagagtgtat | tgggtttgaa | taggaagtgt | catggacaga | 240 |
| gctctgagcc | tgtaggagca | aggagtatca | caaaggctct | ttgccacagc | ccaggcaagc | 300 |
| aatctagagc | ttaagcctag | ggtggcagat | gtgtggaaga | acacagacac | agttgtgcag | 360 |
| agcctgggaa | acggcttggg | cttccaggga | agaggtttat | gttatcggtg | tttggggttg | 420 |


```

gttggtttatt tctgggggct gggggagggga aggtatgtat gttttgttgt ttagtatctc 480
atgtagccag gatggccttg aactcactat gtagctcaga ctgacgtgga attccagggtt 540
ctctcttttac tccccacact ggtagctgtg caccataaaa cctggcttat actttgtaaa 600
atcccaatat tctcttgctt gctttcagca cccttatcac atgtgtggat tctgggatcc 660

```

<210> 246
 <211> 211
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (3)...(14)
 <223> Xaa = any amino acid

<400> 246

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asp | Xaa | Ile | Lys | Ala | Asp | Xaa | Glu | Gln | Arg | Leu | Xaa | Xaa | Ser | His |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Thr | Lys | Pro | Leu | His | Thr | Asp | Lys | Cys | His | Leu | Glu | Ala | Glu | Val | Lys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Glu | Thr | Ser | Val | Tyr | Met | Val | Trp | His | Cys | Ile | Trp | Leu | Arg | Leu | Asn |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Lys | Gly | Phe | Cys | Thr | Glu | Leu | Arg | Ser | Tyr | Leu | Leu | Asp | Asn | Arg |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Val | Tyr | Trp | Val | Ile | Gly | Ser | Val | Met | Asp | Arg | Ala | Leu | Ser | Leu | Glu |
| 65 | | | | | 70 | | | | 75 | | | | | | 80 |
| Gln | Gly | Val | Ser | Gln | Arg | Leu | Phe | Ala | Thr | Ala | Gln | Ala | Ser | Asn | Leu |
| | | | | 85 | | | | 90 | | | | | | 95 | |
| Glu | Leu | Lys | Pro | Arg | Val | Ala | Asp | Val | Trp | Lys | Asn | Thr | Asp | Thr | Val |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Gln | Ser | Leu | Gly | Asn | Gly | Leu | Gly | Phe | Gln | Gly | Arg | Gly | Leu | Cys |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Tyr | Arg | Cys | Leu | Gly | Trp | Val | Val | Tyr | Phe | Trp | Gly | Leu | Gly | Glu | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | Tyr | Val | Cys | Phe | Val | Val | Tyr | Leu | Met | Pro | Gly | Trp | Pro | Thr | His |
| 145 | | | | | 150 | | | | 155 | | | | | | 160 |
| Tyr | Val | Ala | Gln | Thr | Asp | Val | Glu | Phe | Gln | Val | Leu | Ser | Leu | Leu | Pro |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Thr | Leu | Val | Ala | Val | His | His | Lys | Thr | Trp | Leu | Ile | Leu | Cys | Lys | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Pro | Ile | Phe | Ser | Cys | Leu | Leu | Ser | Ala | Pro | Leu | Ser | His | Val | Trp | Ile |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Leu | Gly | Ser | | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | |

<210> 247
 <211> 673
 <212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (4)...(173)

<223> n = A, C, G or T

<400> 247

```
gttnnnnncc nttnnnnnna anttnttnnn aatnaaaaag nanantaann nnanntnnnn 60
nengnttnnn ccccnnttcc nnnnnnctan gnnncnggct tnannntggn gttantngnn 120
ntggtaatac nngggggccaa gcntgcntgt gtaaagcaag nccctnantg agnttctcct 180
catcagcggg gttcagacct ggctggtttg taggtacact agccacgatc agcacaagtc 240
acaagtgcc a ctcacttaca cccatcccc cagcctaaaa ctttctccta aggtgccaag 300
ggatcagtca gtctgaagga tgaaaaccag agcgtgggtg acagctctcc ctttcaaact 360
gaagccaccc tgggggacgg gggatcgtt atcccacgtt taaccataaa tagggtcctg 420
atgaaaagg ggaaggaaaa aaagactact ctaacagcaa atttttcttt tttaggttta 480
aaactcttgc taaaattcct agtgaatcag tgctttggaa taaaagtatc ataagccaat 540
gccacaggta tcatacgcta atgtcaggga ggtgctatgg gtgtcctttt gttgctgttt 600
tgttctgttt tctttcctat gtcaatgtgg cttcacaagt gtgggatttc aagaggtgaa 660
gatacatgga tcc 673
```

<210> 248

<211> 210

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (1)...(56)

<223> Xaa = any amino acid

<400> 248

```
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Lys Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Phe Xaa Xaa Xaa Xaa Xaa
20 25 30
Ala Xaa Xaa Trp Xaa Xaa Xaa Xaa Trp Tyr Xaa Gly Pro Ser Xaa Xaa
35 40 45
Val Ser Lys Xaa Leu Xaa Glu Xaa Leu Leu Ile Ser Gly Val Gln Thr
50 55 60
Trp Leu Val Cys Arg Tyr Thr Ser His Asp Gln His Lys Ser Gln Val
65 70 75 80
Pro Leu Thr Tyr Thr His Pro Pro Ser Leu Lys Leu Ser Pro Lys Val
85 90 95
Pro Arg Asp Gln Ser Val Arg Met Lys Thr Arg Ala Trp Cys Thr Ala
100 105 110
Leu Pro Phe Lys Leu Lys Pro Pro Trp Gly Thr Gly Val Ser Leu Ser
115 120 125
His Val Pro Ile Gly Ser Lys Gly Gly Arg Lys Lys Arg Leu Leu Gln
130 135 140
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Ile | Phe | Leu | Phe | Val | Asn | Ser | Cys | Asn | Ser | Ile | Ser | Ala | Leu | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Lys | Tyr | His | Lys | Pro | Met | Pro | Gln | Val | Ser | Tyr | Ala | Asn | Val | Arg | Glu |
| | | | | 165 | | | | | | 170 | | | | | 175 |
| Val | Leu | Trp | Val | Ser | Phe | Cys | Cys | Cys | Phe | Val | Leu | Phe | Ser | Phe | Leu |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Cys | Gln | Cys | Gly | Phe | Thr | Ser | Val | Gly | Phe | Gln | Glu | Val | Lys | Ile | His |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Gly | Ser | | | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | |

<210> 249

<211> 656

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (2)...(68)

<223> n = A, C, G, or T

<400> 249

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| anaattcgcg | ncggcgctcga | cgcctaacca | aaaacacagg | tcagtttttg | agaccctcac | 60 |
| acagatcntg | gaatgagatc | tgcagccagg | tgtccagccc | aggcttgggc | ttctcattgt | 120 |
| acccaaggct | ggaagggttt | ggtctgtact | aacacacaag | ctcgcagtcc | tgcttgactg | 180 |
| ctggcttccc | aaagaggaga | cattggtctt | gctgggaggc | acagcaggag | agtgaccac | 240 |
| tgccactgca | ctctaactga | gtactaaggc | cactagggct | ttctagacct | cgctttcccc | 300 |
| ttgagcttcc | tggggagggtg | aagtgaggtg | tgtgtgtgtg | tgtgtgtctt | tgtgtgctta | 360 |
| gatttattgc | agggaaaggt | ctaattccaga | atcagtattc | aggctttgtc | atgttgatc | 420 |
| agtgccaagg | tgaccctcaa | ggtcatgtaa | cttaagcaaa | gcttagcatt | tattttattc | 480 |
| ctgaaaactt | aagtatttta | ctttttttgtg | tgttcgtgga | gacatttgca | gtattaatga | 540 |
| ttttattttt | cctaaatcgg | gatggaaaca | aacttttcca | ggttatgtta | ataagccact | 600 |
| taagtgcctt | aaacagcttt | ggtgtagatg | agaattgctg | ggtccgtcat | ggatcc | 656 |

<210> 250

<211> 214

<212> PRT

<213> Mus musculus

<400> 250

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Arg | Arg | Arg | Arg | Arg | Leu | Thr | Lys | Asn | Thr | Gly | Gln | Phe | Trp |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Arg | Pro | Ser | His | Arg | Ser | Trp | Asn | Glu | Ile | Cys | Ser | Gln | Val | Ser | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Pro | Gly | Leu | Gly | Phe | Ser | Leu | Tyr | Pro | Arg | Leu | Glu | Gly | Phe | Gly | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Tyr | His | Thr | Ser | Ser | Gln | Ser | Cys | Leu | Thr | Ala | Gly | Phe | Pro | Lys | Arg |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Arg | His | Trp | Ser | Cys | Trp | Glu | Ala | Gln | Gln | Glu | Ser | Asp | Pro | Leu | Pro |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | His | Ser | Asn | Val | Leu | Arg | Pro | Leu | Gly | Leu | Ser | Arg | Pro | Arg | Phe |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Pro | Leu | Glu | Leu | Pro | Gly | Glu | Val | Lys | Gly | Val | Cys | Val | Cys | Val | Cys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Cys | Val | Leu | Arg | Phe | Ile | Ala | Gly | Lys | Gly | Leu | Ile | Gln | Asn | Gln |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Tyr | Ser | Gly | Phe | Val | Met | Leu | Tyr | Gln | Cys | Gln | Gly | Asp | Pro | Gln | Gly |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| His | Val | Thr | Ala | Lys | Leu | Ser | Ile | Tyr | Phe | Ile | Pro | Glu | Asn | Leu | Ser |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ile | Leu | Leu | Phe | Cys | Val | Phe | Val | Glu | Thr | Phe | Ala | Val | Leu | Met | Ile |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Leu | Phe | Phe | Leu | Asn | Arg | Asp | Gly | Asn | Lys | Leu | Phe | Gln | Val | Met | Leu |
| | | 180 | | | | | 185 | | | | | | 190 | | |
| Ile | Ser | His | Leu | Ser | Ala | Leu | Asn | Ser | Phe | Gly | Val | Asp | Glu | Asn | Cys |
| | 195 | | | | | 200 | | | | | | 205 | | | |
| Trp | Val | Arg | His | Gly | Ser | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | |

<210> 251
 <211> 372
 <212> DNA
 <213> Mus musculus

<400> 251
 gaattcgcgg cgcgcgtcgac acagcttttaa acccccccatg ctcaactgtaa ggttggggcg 60
 ctctgtgaaa tccacacttg gcctcccaag agcttcctca cagcctggta agccttacac 120
 tcgggtgaga tgagatgata tttgtgttta ctggtgcttc gtttttcttt atgggtcgct 180
 tagaatttgt cccactctgt ttgtagtgtt ggctgtactg atgtggaaga gaaagttatg 240
 cagtctcaat cttcttatgc acagcatctc tgctgtactt tgtgggtgcct ctgtttttgtg 300
 cacatgcaca tgtgtttcagt gttggcattg ggaatggcta tgtgcttcac caccgcttag 360
 gcctggggat cc 372

<210> 252
 <211> 211
 <212> PRT
 <213> Mus musculus

<400> 252
 Gly Gln Gly Ala His Ala Gly Arg Gly Gly Ser Ser Ser Pro Met Ala
 1 5 10 15
 Met Pro Ala Cys Arg Ile Ser Trp Lys Trp Pro Leu Phe Trp Ile His
 20 25 30
 Arg Leu Cys Arg Leu Gly Gly Arg Thr Ala Ile Arg Thr Arg Trp Leu
 35 40 45
 Pro Val Ile Leu Arg Ala Trp Arg Arg Met Gly Pro Leu Pro Arg Ala
 50 55 60
 Leu Arg Tyr Arg Arg Ser Arg Phe Ala Ala His Arg Leu Leu Ser Pro

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ser | Arg | Val | Leu | Leu | Asn | Lys | Arg | Lys | Ser | Lys | Leu | Glu | Phe | Ala | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | Ser | Thr | Gln | Leu | Thr | Pro | His | Ala | His | Cys | Lys | Val | Gly | Ala | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Cys | Glu | Ile | His | Thr | Trp | Pro | Pro | Lys | Ser | Phe | Leu | Thr | Ala | Trp | Ala |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | His | Ser | Gly | Glu | Met | Arg | Tyr | Leu | Cys | Leu | Leu | Val | Leu | Arg | Phe |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ser | Leu | Trp | Val | Ala | Asn | Leu | Ser | His | Ser | Val | Cys | Ser | Ala | Gly | Cys |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Thr | Asp | Val | Glu | Glu | Lys | Val | Met | Gln | Ser | Gln | Ser | Ser | Tyr | Ala | Gln |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| His | Leu | Cys | Leu | Thr | Leu | Trp | Cys | Leu | Cys | Phe | Val | His | Met | His | Met |
| | | 180 | | | | | 185 | | | | | | 190 | | |
| Cys | Ser | Val | Leu | Ala | Leu | Gly | Met | Ala | Met | Cys | Phe | Thr | Thr | Ala | Ala |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Trp | Gly | Ser | | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | |

<210> 253
 <211> 689
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (62)...(85)
 <223> n = A, C, G, or T

<400> 253

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| aggtaagtag | tgttgactta | cattaagcgc | ctacatcgat | ttctttcatt | gaagaatata | 60 |
| cntctagtga | tttttacctg | ggcgttttt | tgagagtga | ggtatagggtg | acaggtagga | 120 |
| ggagtggctg | tgataagggg | gactgctggt | cctcctgaag | ctattgatca | tgccccaaga | 180 |
| agctgatgac | caccatgtgt | cattgaatat | aaaccttggg | gtttagtga | acttttgaag | 240 |
| ttaattccaa | tttacctaac | agactttgga | tttgaagaga | ctttaaatct | gtctcttatt | 300 |
| acttttgtgt | tttgatgtct | tttcagtaat | gtatcttttg | tgagttaccc | tagttacaaa | 360 |
| gtacctgagt | aacagagtac | cttcgagaca | gagtacccta | gtaacagagt | accctagtaa | 420 |
| cagagtaccc | tagagacagt | acctcagtga | cagagtaccc | tagtgacaga | tgaccctagt | 480 |
| gacaggttac | ctagttacag | gttaccctag | tgacattgtt | atgttatctt | tgaagataaa | 540 |
| atagtctctgt | gctacatgtc | tttaaataat | aggttaagaa | ttgttctaga | aatttacata | 600 |
| atgatttgca | tagattagct | cccatctttg | ttttattcct | ttgttgtttg | tttgagagaa | 660 |
| gctttctgct | acatcgccag | agcggatcc | | | | 689 |

<210> 254
 <211> 209
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (27)...(27)
 <223> Xaa = any amino acid

<400> 254

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ser | Ser | Val | Asp | Leu | His | Ala | Pro | Thr | Ser | Ile | Ser | Phe | Ile | Glu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Glu | Tyr | Thr | Ser | Ser | Asp | Phe | Tyr | Leu | Gly | Xaa | Phe | Leu | Arg | Val | Arg |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Val | Val | Thr | Gly | Arg | Arg | Ser | Gly | Cys | Asp | Lys | Gly | Asp | Cys | Trp | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ser | Ser | Tyr | Ser | Cys | Pro | Lys | Lys | Leu | Met | Thr | Thr | Met | Cys | His | Ile |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Thr | Leu | Gly | Phe | Ser | Glu | Thr | Phe | Glu | Val | Asn | Ser | Asn | Leu | Pro | Asn |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Arg | Leu | Trp | Ile | Arg | Asp | Phe | Lys | Ser | Val | Ser | Tyr | Tyr | Phe | Cys | Val |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Leu | Met | Ser | Phe | Gln | Cys | Ile | Phe | Cys | Glu | Leu | Pro | Leu | Gln | Ser | Thr |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Thr | Glu | Tyr | Leu | Arg | Asp | Arg | Val | Pro | Gln | Ser | Thr | Leu | Val | Thr |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Glu | Tyr | Pro | Arg | Asp | Ser | Thr | Ser | Val | Thr | Glu | Tyr | Pro | Ser | Asp | Arg |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Pro | Gln | Val | Thr | Leu | Gln | Val | Thr | Leu | Val | Thr | Leu | Leu | Cys | Tyr | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Arg | Asn | Ser | Ser | Val | Leu | His | Val | Phe | Lys | Val | Lys | Asn | Cys | Ser | Arg |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Asn | Leu | His | Asn | Asp | Leu | His | Arg | Leu | Ala | Pro | Ile | Phe | Val | Leu | Phe |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Cys | Cys | Leu | Phe | Glu | Arg | Ser | Phe | Leu | Leu | His | Arg | Gln | Ser | Gly |
| | | 195 | | | | | 200 | | | | | 205 | | | |

Ser

<210> 255
 <211> 668
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (41)...(151)
 <223> n = A, C, G or T

<400> 255

gatcaaagaa ggggccttca agaacctgaa ggacttgcac ncnttgatcc nttgtcanca 60
 acaagatcag caaatcagt ccagaggcat tcaaacctct ngtgaagttg gaaaggcttt 120
 acctgtttta gaaccaacta aaggaactgc ntgaaaaaat gcccagaact ctccaggaac 180

```

ttcgtgtcca tgagaatgag atcaccaagc tgcggaaatc cgacttcaat ggactgaaca 240
atgtgcttgt catagaactg ggcggcaacc cactgaaaaa ctctgggatt gaaaacggag 300
ccttccaggg actgaagagt ctctcataca ttgcgcatct agacaccaac ataactgcga 360
tccctcaagg tctgcctact tctctcactg aagtgcattc agatggcaac aagatcacca 420
aggttgatgc acccagcctg aaaggactga ttaatttgtc taaactggga ttgagcttca 480
acagcatcac cgttatggag aatggcagtc tggccaatgt tcctcatctg agggaactcc 540
acttgacaaa caacaaactc ctcagggtgc ctgctgggct ggcacagcat aagtatatcc 600
aggtcgtcta ccttcacaac aacaacatct ccgcagttgg gcaaaatgac ttctgccaag 660
ctgatcc 668

```

<210> 256

<211> 220

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (12)...(48)

<223> Xaa = any amino acid

<400> 256

```

Ser Lys Lys Gly Pro Ser Arg Thr Arg Thr Cys Xaa Xaa Ser Xaa Val
1      5      10      15
Xaa Asn Lys Ile Ser Lys Ile Ser Pro Glu Ala Phe Lys Pro Leu Val
20      25      30
Lys Leu Glu Arg Leu Tyr Leu Phe Lys Asn Gln Leu Lys Glu Leu Xaa
35      40      45
Glu Lys Met Pro Arg Thr Leu Gln Glu Leu Arg Val His Glu Asn Glu
50      55      60
Ile Thr Lys Leu Arg Lys Ser Asp Phe Asn Gly Leu Asn Asn Val Leu
65      70      75      80
Val Ile Glu Leu Gly Gly Asn Pro Leu Lys Asn Ser Gly Ile Glu Asn
85      90      95
Gly Ala Phe Gln Gly Leu Lys Ser Leu Ser Tyr Ile Arg Ile Ser Asp
100     105     110
Thr Asn Ile Thr Ala Ile Pro Gln Gly Leu Pro Thr Ser Leu Thr Glu
115     120     125
Val His Leu Asp Gly Asn Lys Ile Thr Lys Val Asp Ala Pro Ser Leu
130     135     140
Lys Gly Leu Ile Asn Leu Ser Lys Leu Gly Leu Ser Phe Asn Ser Ile
145     150     155     160
Thr Val Met Glu Asn Gly Ser Leu Ala Asn Val Pro His Leu Arg Glu
165     170     175
Leu His Leu Asp Asn Asn Lys Leu Leu Arg Val Pro Ala Gly Leu Ala
180     185     190
Gln His Lys Tyr Ile Gln Val Val Tyr Leu His Asn Asn Asn Ile Ser
195     200     205
Ala Val Gly Gln Asn Asp Phe Cys Gln Ala Gly Ser
210     215     220

```

<210> 257
 <211> 692
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (64)...(67)
 <223> n = A, C, G or T

<400> 257
 gactacatag gaaacgaagt ctcgaaatcc aacaataaac tcctcctcct cctcctcctc 60
 cttnttntat ctcttcatat tgtaaagatc ttgtgataaa agtggttttg cttcctggat 120
 tagttttatg tttaagggtta aacttggtgc ttttcccctg atttatttct gagcaagttc 180
 attagtatat gtggaaacgt tcctgatttg tgtatgttga aattgtatcc tgttacttta 240
 cccaaagtat ttattatatc taggactttt ctagttgatt ttccaagtct ttgcttttg 300
 tgtataggat tacattgtct caaagtaggg ccaattttcc cttgcctttt ctatttttat 360
 cccttttctt tccctgcctt atccctctaa gacatcaagc atcatcctga gtaagaaggg 420
 aagaggacct cttctctcat tcctgctttt cttattgaat gtagcattga ctacagttct 480
 gtcagctata actttttattg tggttaacgta cattcttttg atgcttggtg cacctgggct 540
 tttatcagga aatgatgttg aaattaataa agaggctttt cctcagctgc tcagacagcc 600
 tctgttgag tctatctata tgcacctca cgtgtattga tttgtgtatg ttgaatcacc 660
 tgtgcatccc tggaatgaaa gtaactggat cc 692

<210> 258
 <211> 217
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (20)...(21)
 <223> Xaa = Any amino acid

<400> 258
 Leu His Arg Lys Arg Ser Leu Glu Ile Gln Gln Thr Pro Pro Pro Pro
 1 5 10 15
 Pro Pro Pro Xaa Xaa Ile Ser Ser Tyr Cys Lys Asp Leu Val Ile Lys
 20 25 30
 Val Phe Leu Leu Pro Gly Leu Val Leu Cys Leu Arg Leu Asn Leu Leu
 35 40 45
 Leu Phe Pro Phe Ile Ser Glu Gln Val His Tyr Met Trp Lys Arg Ser
 50 55 60
 Phe Val Tyr Val Glu Ile Val Ser Cys Tyr Phe Thr Gln Ser Ile Tyr
 65 70 75 80
 Tyr Ile Asp Phe Ser Ser Phe Ser Lys Ser Phe Ala Phe Val Tyr Arg
 85 90 95
 Ile Thr Leu Ser Gln Ser Arg Ala Asn Phe Pro Leu Pro Phe Leu Phe
 100 105 110

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ser | Leu | Phe | Phe | Pro | Cys | Leu | Ile | Pro | Leu | Arg | His | Gln | Ala | Ser |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Ser | Val | Arg | Arg | Glu | Glu | Asp | Leu | Phe | Ser | His | Ser | Cys | Phe | Ser | Tyr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Met | His | Leu | Gln | Phe | Cys | Gln | Leu | Leu | Leu | Leu | Cys | Arg | Thr | Phe | Phe |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Cys | Leu | Cys | His | Leu | Gly | Phe | Tyr | Gln | Glu | Met | Met | Leu | Lys | Leu | Ile |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Lys | Arg | Ser | Phe | Leu | Ser | Cys | Ser | Asp | Ser | Leu | Cys | Trp | Ser | Leu | Ser |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ile | Cys | Ile | Leu | Thr | Cys | Ile | Asp | Leu | Cys | Met | Leu | Asn | His | Leu | Cys |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Ile | Pro | Gly | Met | Lys | Val | Thr | Gly | Ser | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 259

<211> 705

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (648)...(648)

<223> n = A, C, G or T

<400> 259

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| cttcagcatc | ttttactttc | accagcggtt | ctgggtggga | tcccagggtg | cggatctcaa | 60 |
| gctggttg | agagttggtg | ttcaaaccac | ggttgtaa | gttaaccacc | gctggcgcg | 120 |
| cgcggcgaac | cgccagatta | tagctggcag | gcgtctcatc | ggtactgtca | aattgcgag | 180 |
| tggaaagcgg | gttaaggctg | cgcagcgaag | gcatggcaac | cagcagaata | gcgccgacaa | 240 |
| ttaatccaat | cgcaacggaa | cgtaagagct | tcacaaacat | gatggaggcg | tcattaataaa | 300 |
| agggaaacggc | agcagcatac | cacgagttaa | ccggacatca | cacgtaagcc | tgatgcccgg | 360 |
| tttacgacat | taacgcatca | gcagatagat | gctttcattg | ccgcgtacaa | tttgaggggc | 420 |
| gatgatggcc | ggttttgccg | ccagcacttt | acgcatttca | gcaatcgagt | tcacccgatc | 480 |
| gcggttgacg | ccaatgatca | catcgtcttt | ttgcaagcca | gcctgagcag | ctgggcttct | 540 |
| ttgacaactt | catcgatttt | aatacctttg | ccgccatctt | ttactgacca | tcgctcaacg | 600 |
| ttgcaccttc | cagcgctggc | gtgatcattt | cagcgctggc | cgacgaanaa | gtgctggtat | 660 |
| cgagcgtcac | ttctactttc | cagtgggtttg | ccgttacgca | caagc | | 705 |

<210> 260

<211> 216

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (19)...(19)

<223> Xaa = Any amino acid

<400> 260

```
Leu Cys Val Thr Ala Asn His Trp Lys Val Glu Val Thr Leu Asp Thr
 1          5          10          15
Ser Thr Xaa Ser Ser Ala Ser Ala Glu Met Ile Thr Pro Ala Leu Glu
 20          25          30
Gly Ala Thr Leu Ser Asp Gly Gln Lys Met Ala Ala Lys Val Leu Lys
 35          40          45
Ser Met Lys Leu Ser Lys Lys Pro Ser Cys Ser Gly Trp Leu Ala Lys
 50          55          60
Arg Arg Cys Asp His Trp Arg Gln Pro Arg Ser Gly Glu Leu Asp Cys
 65          70          75          80
Asn Ala Ser Ala Gly Gly Lys Thr Gly His His Arg Pro Ala Asn Cys
 85          90          95
Thr Arg Gln Lys His Leu Ser Ala Asp Ala Leu Met Ser Thr Gly His
100          105          110
Gln Ala Tyr Val Cys Pro Val Asn Ser Trp Tyr Ala Ala Val Pro
115          120          125
Phe Phe Asn Asp Ala Ser Ile Met Phe Val Lys Leu Leu Arg Ser Val
130          135          140
Ala Ile Gly Leu Ile Val Gly Ala Ile Leu Leu Val Ala Met Pro Ser
145          150          155          160
Leu Arg Ser Leu Asn Pro Leu Ser Thr Pro Gln Phe Asp Ser Thr Asp
165          170          175
Glu Thr Pro Ala Ser Tyr Asn Leu Ala Val Arg Arg Ala Ala Pro Ala
180          185          190
Val Val Asn Val Tyr Asn Arg Gly Leu Asn Thr Asn Ser His Asn Gln
195          200          205
Leu Glu Ile Arg Thr Leu Gly Ser
210          215
```

<210> 261

<211> 685

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (1)...(295)

<223> n = A, C, G or T

<400> 261

```
ncattcctga aggacccac ncgatgcttt ttaantaaca agtntgcagc cattgntgnt 60
ctgcgcgagg agtccacacc tcagtgcct ctgccacgtc tgttgccaca aagaagacag 120
agcaaggccc accatcctcc gagtacatt ttgaacggga atctaaatat ggtgcacaca 180
attaccatcc tttgcctgta gccctggaga gaggaaaagg catttatatg tgggatgtgg 240
aaggcaggca gtacttcgat ttcctgagtg cttatggtgc tgtcagccaa ggacnctgcc 300
acccaaagat catagatgcc atgaagagtc aggtggacaa gctgacatta acatctcggg 360
ctttctataa caatgtcctt ggtgaatacg aggagtacat caccaagctt ttcaactaca 420
acaaagttct ccctatgaat acaggagtgg aggctggaga gactgcatgt aagctcgctc 480
```

```

gtcgttgggg ctacaccgtg aaaggcatcc agaaatacaa agcaaagatt gtttttgctg 540
atgggaactt ttggggtcga acactatctg caatctccag ttccacagat ccgaccagtt 600
atgatggctt tggacccttc atgccaggct ttgaaaccat cccatataac gatctgcccg 660
cactggagcg tgctcttcag gatcc 685

```

```

<210> 262
<211> 217
<212> PRT
<213> Mus musculus

```

```

<220>
<221> UNSURE
<222> (6)...(18)
<223> Xaa = Any amino acid

```

```

<400> 262
His Ser Arg Thr Pro Xaa Asp Ala Phe Xaa Thr Ser Xaa Gln Pro Leu
1      5      10      15
Xaa Xaa Cys Ala Arg Ser Pro His Leu Ser Arg Leu Cys His Val Cys
20     25     30
Cys His Lys Glu Asp Arg Ala Arg Pro Thr Ile Leu Arg Val His Phe
35     40     45
Thr Gly Ile Ile Trp Cys Thr Gln Leu Pro Ser Phe Ala Cys Ser Pro
50     55     60
Gly Glu Arg Lys Arg His Leu Tyr Val Gly Cys Gly Arg Gln Ala Val
65     70     75     80
Leu Arg Phe Pro Glu Cys Leu Trp Cys Cys Gln Pro Arg Thr Leu Pro
85     90     95
Pro Lys Asp His Arg Cys His Glu Glu Ser Gly Gly Gln Ala Asp Ile
100    105    110
Asn Ile Ser Gly Phe Leu Gln Cys Pro Trp Ile Arg Gly Val His His
115    120    125
Gln Ala Phe Gln Leu Gln Gln Ser Ser Pro Tyr Glu Tyr Arg Ser Gly
130    135    140
Gly Trp Arg Asp Cys Met Ala Arg Ser Ser Leu Gly Leu His Arg Glu
145    150    155    160
Arg His Pro Glu Ile Gln Ser Lys Asp Cys Phe Cys Trp Glu Leu Leu
165    170    175
Gly Ser Asn Thr Ile Cys Asn Leu Gln Phe His Arg Ser Asp Gln Leu
180    185    190
Trp Leu Trp Thr Leu His Ala Arg Leu Asn His Pro Ile Arg Ser Ala
195    200    205
Arg Thr Gly Ala Cys Ser Ser Gly Ser
210    215

```

```

<210> 263
<211> 702
<212> DNA
<213> Mus musculus

```

<220>
 <221> unsure
 <222> (651)...(699)
 <223> n = A, C, G, or T

<400> 263
 cttagcatct tttacttttca ccagcgtttc tgggtgggat ccaggggaatc ctgcagttcc 60
 aggagggcca gggggaccag gttgcccac actgccccga gcaccatcat tgcctcgagc 120
 acctgcagct ccaggaaggc ctggtcgtcc tcgctcacca ggagcccctc taggacccat 180
 gggggccagga gctccgttgt ctcttggaag accattttca cccttcagtc caggagcacc 240
 tgtttctccc ttttctccat tgcgtccatc aaagcctctg tgtcctttca taccagggaa 300
 tccaggcatg ccagctgggc ctttgatacc tggagggtcca ggcagtccac gctctccagg 360
 tcgtccaggt cttcctgact ctccatcctt tccagcagga ccagctggac caagagcacc 420
 aggaggtcct ggagggcctg ctggaccagc ttgaccaggt tcaccagggg gaccttggtg 480
 tccaggagaa ccaggagatc caggatgtcc agaagaacca gggggtcctg gagggcctgg 540
 tggaccagct ggtcccggat agccacccat tcttcactt cagacttgac atcatatgag 600
 tcgaattggg gagaataatt ttggccacca gttggacatg attacagatt ncanggggagc 660
 caggaagccc anggagacct ggttgtcctg gaanggcang gt 702

<210> 264
 <211> 220
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (2)...(18)
 <223> Xaa = Any amino acid

<400> 264
 Thr Xaa Pro Phe Gln Asp Asn Gln Val Ser Xaa Gly Phe Leu Ala Pro
 1 5 10 15
 Xaa Xaa Ser Val Ile Met Ser Asn Trp Trp Pro Lys Leu Phe Ser Pro
 20 25 30
 Ile Arg Leu Ile Cys Gln Val Ser Gly Arg Met Gly Gly Tyr Pro Gly
 35 40 45
 Pro Ala Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Ser Ser Gly His
 50 55 60
 Pro Gly Ser Pro Gly Ser Pro Gly Tyr Gln Gly Pro Pro Gly Glu Pro
 65 70 75 80
 Gly Gln Ala Gly Pro Ala Gly Pro Pro Gly Pro Pro Gly Ala Leu Gly
 85 90 95
 Pro Ala Gly Pro Ala Gly Lys Asp Gly Glu Ser Gly Arg Pro Gly Arg
 100 105 110
 Pro Gly Glu Arg Gly Leu Pro Gly Pro Pro Gly Ile Lys Gly Pro Ala
 115 120 125
 Gly Met Pro Gly Phe Pro Gly Met Lys Gly His Arg Gly Phe Asp Gly
 130 135 140
 Arg Asn Gly Glu Lys Gly Glu Thr Gly Ala Pro Gly Leu Lys Gly Glu

| | | | | | | |
|---|--|-----|--|-----|--|-----|
| 145 | | 150 | | 155 | | 160 |
| Asn Gly Leu Pro Gly Asp Asn Gly Ala Pro Gly Pro Met Gly Pro Arg | | | | | | |
| | | 165 | | 170 | | 175 |
| Gly Ala Pro Gly Glu Arg Gly Arg Pro Gly Leu Pro Gly Ala Ala Gly | | | | | | |
| | | 180 | | 185 | | 190 |
| Ala Arg Gly Asn Asp Gly Ala Arg Gly Ser Asp Gly Gln Pro Gly Pro | | | | | | |
| | | 195 | | 200 | | 205 |
| Pro Gly Pro Pro Gly Thr Ala Gly Phe Pro Gly Ser | | | | | | |
| | | 210 | | 215 | | 220 |

<210> 265

<211> 691

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (19)...(187)

<223> n = A, C, G or T

<400> 265

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| tttctttgtt | gctttaacnt | atcaaggggt | ttttgctctg | cattcatgag | tgcnngttggg | 60 |
| tagtttttcc | attgctcaca | aagctttgtg | tgtacaagga | cttcaagaag | cacgggtgcc | 120 |
| aagaaagatt | tggtgctctg | accttttggg | gatgtttatc | ccatatcttt | acgggctcta | 180 |
| cctcatntgg | gctgtgtttg | agatgttcac | tcctatcctg | gaaagaagcg | ggtcggagat | 240 |
| cccccccgac | gttgtgctgg | cctccatcct | ggctgtctgt | gtgatgatcc | tctcttccta | 300 |
| ttttattacc | ttcatctacc | ttgtgaacag | cacaaagaaa | accattctga | ctctaatact | 360 |
| ggtgtgcgcg | gtcaccttcc | tccttgtctg | cagtggagcc | tttttcccat | atagttctaa | 420 |
| tcccagagag | ccaaagccaa | agagagtgtt | tcttcagcac | gtgagtagaa | cttttcataa | 480 |
| cttagaagga | agcgtagtaa | aaagagactc | tggaatatgg | atcaatgggt | ttgattatac | 540 |
| tggaatgtct | cacgtaacac | ctcacattcc | tgagatcaac | gacacaatcc | gagctcactg | 600 |
| tgaggaggat | gccccactct | gtggcttccc | ttggtatctt | ccagtgcact | tcctgatcag | 660 |
| gaaaaactgg | tatcttccaa | cccccggatc | c | | | 691 |

<210> 266

<211> 229

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (17)...(61)

<223> Xaa = Any amino acid

<400> 266

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Phe | Val | Ala | Leu | Thr | Tyr | Gln | Gly | Val | Phe | Ala | Leu | His | Ser | Val |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Xaa | Leu | Gly | Ser | Phe | Ser | Ile | Ala | His | Lys | Ala | Leu | Cys | Val | Gln | Gly |
| | | | 20 | | | | 25 | | | | | | 30 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gln | Glu | Ala | Arg | Cys | Pro | Arg | Lys | Ile | Cys | Cys | Ser | Asp | Leu | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Met | Phe | Ile | Pro | Tyr | Leu | Tyr | Gly | Leu | Tyr | Leu | Xaa | Trp | Ala | Val |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Phe | Glu | Met | Phe | Thr | Pro | Ile | Leu | Glu | Arg | Ser | Gly | Ser | Glu | Ile | Pro |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Pro | Asp | Val | Val | Leu | Ala | Ser | Ile | Leu | Ala | Val | Cys | Val | Met | Ile | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ser | Ser | Tyr | Phe | Ile | Thr | Phe | Ile | Tyr | Leu | Val | Asn | Ser | Thr | Lys | Lys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Thr | Ile | Leu | Thr | Leu | Ile | Leu | Val | Cys | Ala | Val | Thr | Phe | Leu | Leu | Val |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Cys | Ser | Gly | Ala | Phe | Phe | Pro | Tyr | Ser | Ser | Asn | Pro | Glu | Ser | Pro | Lys |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Pro | Lys | Arg | Val | Phe | Leu | Gln | His | Val | Ser | Arg | Thr | Phe | His | Asn | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Glu | Gly | Ser | Val | Val | Lys | Arg | Asp | Ser | Gly | Ile | Trp | Ile | Asn | Gly | Phe |
| | | | 165 | | | | | | 170 | | | | | 175 | |
| Asp | Tyr | Thr | Gly | Met | Ser | His | Val | Thr | Pro | His | Ile | Pro | Glu | Ile | Asn |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Asp | Thr | Ile | Arg | Ala | His | Cys | Glu | Glu | Asp | Ala | Pro | Leu | Cys | Gly | Phe |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Pro | Trp | Tyr | Leu | Pro | Val | His | Phe | Leu | Ile | Arg | Lys | Asn | Trp | Tyr | Leu |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Pro | Thr | Pro | Gly | Ser | | | | | | | | | | | |
| 225 | | | | | | | | | | | | | | | |

<210> 267

<211> 671

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (6)...(6)

<223> n = A, C, G, or T

<400> 267

| | | | | | | |
|-------------|-------------|------------|------------|-------------|------------|-----|
| tgtttnacat | attgttaaca | tttttaaaaa | gtgtgtgctt | gtatgtatgt | tgagggcatg | 60 |
| atatgtgcac | aagaggcagg | gcctgaaaag | ggaggccagg | agaaagtgtc | agatacttac | 120 |
| aggggggtcac | aagcctcctg | ttgtagggaa | tcagccttgg | atcttttgca | agaaccatac | 180 |
| ttgaatttaa | ctggagacat | ctttccagtc | cctagaaatt | taatttgtgat | ttgagtgaag | 240 |
| gttgtcaaga | ttttctgtta | cctatgttaa | actgagtctt | tgtttgtttg | tttcgcacgc | 300 |
| cctcttttctt | tttaagtttag | cgcacagagc | ggtgtgtttt | gtgatgacat | ttgcttgtgt | 360 |
| agttattgct | gtgctttttt | cttaaacatc | ctttccccag | ctgacttttt | ttttcccctt | 420 |
| gcttttttaat | tttatatgga | tttgtgtcat | gatatcatgg | aacgttggtg | aaacactgga | 480 |
| atctagcctt | ttgttttcta | gattgagaac | gtgaaatcca | tgctaaatat | ctactgacat | 540 |
| gtccacatct | tgatgttggg | gcagagctga | gactcaaagt | catcttattc | aagtgtcatg | 600 |
| tgttcttttat | gataccatat | tattaccttg | tgcaatatgt | aatttttcatt | ttgtgttttc | 660 |

ccccctggatc c

<210> 268

<211> 211

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (2)...(2)

<223> Xaa = Any amino acid

<400> 268

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Xaa | Ile | Leu | Leu | Thr | Phe | Leu | Lys | Ser | Val | Cys | Leu | Tyr | Val | Cys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Gly | His | Asp | Met | Cys | Thr | Arg | Gly | Arg | Ala | Lys | Gly | Arg | Pro | Gly | Glu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ser | Val | Arg | Tyr | Leu | Gln | Gly | Val | Thr | Ser | Leu | Leu | Leu | Gly | Ile | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Leu | Gly | Ser | Phe | Ala | Arg | Thr | Ile | Leu | Glu | Phe | Asn | Trp | Arg | His | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Ser | Pro | Lys | Phe | Asn | Cys | Asp | Leu | Ser | Glu | Gly | Cys | Gln | Asp | Phe |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Leu | Pro | Met | Leu | Asn | Val | Phe | Val | Cys | Leu | Phe | Arg | Thr | Pro | Ser |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Phe | Phe | Leu | Ser | Arg | Thr | Glu | Arg | Cys | Val | Leu | His | Leu | Leu | Val | Leu |
| | | | 100 | | | | | 105 | | | | | | 110 | |
| Leu | Leu | Cys | Phe | Phe | Leu | Lys | His | Pro | Phe | Pro | Ser | Leu | Phe | Phe | Ser |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Pro | Cys | Phe | Leu | Ile | Leu | Tyr | Gly | Phe | Val | Ser | Tyr | His | Gly | Thr | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Leu | Lys | His | Trp | Asn | Leu | Ala | Phe | Cys | Phe | Leu | Asp | Glu | Arg | Glu | Ile |
| 145 | | | | 150 | | | | | | 155 | | | | | 160 |
| His | Ala | Lys | Tyr | Leu | Leu | Thr | Cys | Pro | His | Leu | Asp | Val | Gly | Ala | Glu |
| | | | 165 | | | | | 170 | | | | | 175 | | |
| Leu | Arg | Leu | Lys | Val | Ile | Leu | Phe | Lys | Cys | His | Val | Phe | Phe | Met | Ile |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Pro | Tyr | Tyr | Tyr | Leu | Val | Gln | Tyr | Val | Ile | Phe | Ile | Leu | Cys | Phe | Pro |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Pro | Gly | Ser | | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | |

<210> 269

<211> 684

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (124)...(153)

<223> n = A, C, G or T

<400> 269

```
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agtgcaagag tagagaactc agatgccaac taattcttga gcatggataa ccaaatttca 120
gggnaggagc cgttttcaat agctaaaagt gcntgagtta taatcacctt gtcacgtttt 180
ggttgggttc tgaatttgca taccaaccag agcatgaaca ccagtccaca gcatatggca 240
gcaccaaaca aaatcactcc caccatttcc ttaaagtaag aaaaagcaga ggtaagccaa 300
gaggtaaagt ctccgagggt cactggttcc actctggtcc cattaaggct caggatctgc 360
atctgcagtc tcgtctgcaa cctttccagc tcttgcgacc agttcccctt caggtaactc 420
gataggtctg tacttttaat aaaagaatta ttaatatacc tattgggagt aatgcacaca 480
tgcaaagtgg atgccacaca actcatttgt atgacatcca tcatctgttc catgtcatgt 540
tgtaaaatat ccactctgat tcactaacat taaccctgag gtgatatgag aatccaccct 600
ttgcagggta agcaatgcct cagacgtttt ttctgctatc tgacttatag tgtcagcagt 660
attaatttga tctgccctgg atcc 684
```

<210> 270

<211> 220

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (40)...(40)

<223> Xaa = Any amino acid

<400> 270

```
Thr Ser Val Met Cys Lys Gly Asp Gln Ser Val Ser Leu Ser His Leu
 1          5          10          15
Ser Val Trp Ser Ala Arg Val Glu Asn Ser Asp Ala Asn Phe Leu Ser
      20          25          30
Met Asp Asn Gln Ile Ser Gly Xaa Glu Pro Phe Ser Ile Ala Lys Ser
      35          40          45
Ala Val Ile Ile Thr Leu Ser Arg Phe Gly Trp Val Leu Asn Leu His
      50          55          60
Thr Asn Gln Ser Met Asn Thr Ser Pro Gln His Met Ala Ala Pro Asn
65          70          75          80
Lys Ile Thr Pro Thr His Ser Leu Lys Glu Lys Ala Glu Val Ser Gln
      85          90          95
Glu Val Lys Ser Pro Arg Val Thr Gly Ser Thr Leu Val Pro Leu Arg
      100          105          110
Leu Arg Ile Cys Ile Cys Ser Leu Val Cys Asn Leu Ser Ser Ser Cys
      115          120          125
Asp Gln Phe Pro Phe Arg Leu Asp Arg Ser Val Leu Leu Ile Lys Glu
      130          135          140
Leu Leu Ile Tyr Leu Leu Gly Val Met His Thr Cys Lys Val Asp Ala
145          150          155          160
Thr Gln Leu Ile Cys Met Thr Ser Ile Ile Cys Ser Met Ser Cys Cys
      165          170          175
```


| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ile | Ser | Thr | Leu | Ile | His | His | Pro | Gly | Asp | Met | Arg | Ile | His | Pro |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Leu | Gln | Gly | Lys | Gln | Cys | Leu | Arg | Arg | Phe | Phe | Cys | Tyr | Leu | Thr | Tyr |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Ser | Val | Ser | Ser | Ile | Asn | Leu | Ile | Cys | Pro | Gly | Ser | | | | |
| | 210 | | | | | 215 | | | | | 220 | | | | |

<210> 271
 <211> 703
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (610)...(695)
 <223> n = A, C, G or T

<400> 271

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| cttcagcatc | ttttactttc | accagcggtt | ctgggtggga | tcttgagcag | gggctccagg | 60 |
| ggccccagga | tgcccaggcc | ccatgtgtgg | ggcaggtctt | ctgggtgtca | caggcctgtg | 120 |
| attgctgggc | ctctcctggg | cagtggcccc | cacacttagg | agcaggatta | tcacatactc | 180 |
| gttgacggat | ctgggttcct | ttggagcatg | tgacagagca | aggccccag | ggccccact | 240 |
| cagaccagcc | acccatctct | ggacagcatg | gctggtcctc | acaggcctgt | agctgccact | 300 |
| caagagttcc | aggagccaca | ttctcagagc | actgaccacc | tctgcccaca | cagcgctgtg | 360 |
| gtcgcagctg | ggacccctca | gaacatgtaa | ctgagcaggg | cccccataag | gaccatgctg | 420 |
| accattgtgg | agacctgcat | gcctgacaga | ggccaccatc | atgctcctgg | aaggcatagg | 480 |
| cagcgttgag | acagcagtct | tctaccctga | tgtctctccc | aagtaggcct | ttgcacctgc | 540 |
| cagaggactc | ctcatactgg | gtgaagcaaa | gcacaggggtc | tgagcctgtg | gctggcagga | 600 |
| taaccagtan | cagcaggagc | cactgagggg | cttgcatctt | ancangcatt | ttgaacacta | 660 |
| tgtttctgca | ctcctacaaa | aaagangcgt | cnacnccggc | cgc | | 703 |

<210> 272
 <211> 221
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (19)...(31)
 <223> Xaa = Any amino acid

<400> 272

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ala | Gly | Val | Asp | Ala | Ser | Phe | Leu | Glu | Cys | Arg | Asn | Ile | Val | Phe |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Lys | Met | Xaa | Xaa | Glu | Met | Gln | Ala | Pro | Gln | Trp | Leu | Leu | Leu | Xaa | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Val | Ile | Leu | Pro | Ala | Thr | Gly | Ser | Asp | Pro | Val | Leu | Cys | Phe | Thr | Gln |
| | 35 | | | | | 40 | | | | | | 45 | | | |
| Tyr | Glu | Glu | Ser | Ser | Gly | Arg | Cys | Lys | Gly | Leu | Leu | Gly | Arg | Asp | Ile |

| | | |
|---|-----|-----|
| 50 | 55 | 60 |
| Arg Val Glu Asp Cys Cys Leu Asn Ala Ala Tyr Ala Phe Gln Glu His | | |
| 65 | 70 | 75 |
| Asp Gly Gly Leu Cys Gln Ala Cys Arg Ser Pro Gln Trp Ser Ala Trp | | |
| 85 | 90 | 95 |
| Ser Leu Trp Gly Pro Cys Ser Val Thr Cys Ser Glu Gly Ser Gln Leu | | |
| 100 | 105 | 110 |
| Arg His Arg Arg Cys Val Gly Arg Gly Gly Gln Cys Ser Glu Asn Val | | |
| 115 | 120 | 125 |
| Ala Pro Gly Thr Leu Glu Trp Gln Leu Gln Ala Cys Glu Asp Gln Pro | | |
| 130 | 135 | 140 |
| Cys Cys Pro Glu Met Gly Gly Trp Ser Glu Trp Gly Pro Trp Gly Pro | | |
| 145 | 150 | 155 |
| Cys Ser Val Thr Cys Ser Lys Gly Thr Gln Ile Arg Gln Arg Val Cys | | |
| 165 | 170 | 175 |
| Asp Asn Pro Ala Pro Lys Cys Gly Gly His Cys Pro Gly Glu Ala Gln | | |
| 180 | 185 | 190 |
| Gln Ser Gln Ala Cys Asp Thr Gln Lys Thr Cys Pro Thr His Gly Ala | | |
| 195 | 200 | 205 |
| Trp Ala Ser Trp Gly Pro Trp Ser Pro Cys Ser Gly Ser | | |
| 210 | 215 | 220 |

<210> 273
 <211> 685
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (10)...(79)
 <223> n = A, C, G or T

<400> 273

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|-----|
| aaaaaaagtn | aagttggcct | tgtgcgtaac | ggccaaccca | ctgaaagtag | aagtgacggt | 60 |
| tcgataccag | cacttnttng | tcggccagcg | ttgaaatgat | cacgccagcg | tggaaggtgc | 120 |
| aacgttgagc | gatggtcagc | taaaagatgg | cggcaaaggt | attaaaatcg | atgaagttgt | 180 |
| caaagaagcc | cagctgctca | ggctggcttg | caaaaagacg | atgtgatcat | tggcgtcaac | 240 |
| cgcgatcggg | tgaactcgat | tgctgaaatg | cgtaaagtgc | tgcggcaaaa | ccggccatca | 300 |
| tcgccctgca | aattgtacgc | ggcaatgaaa | gcattctatct | gctgatgcgt | taatgtcgta | 360 |
| aaccgggcat | caggcttacg | tgtgatgtcc | ggttaactcg | tggtatgctg | ctgccgttcc | 420 |
| cttttttaat | gacgcctcca | tcatgtttgt | gaagctctta | cgttccgttg | cgattggatt | 480 |
| aattgtcggc | gctattctgc | tggttgccat | gccttcgctg | cgcagcctta | acccgctttc | 540 |
| cactccgcaa | tttgacagta | ccgatgagac | gcctgccagc | tataatctgg | cggttcgccg | 600 |
| cgccgcgcca | gcggtgggta | acgtttacaa | ccgtgggttg | aacaccaact | ctcacaacca | 660 |
| gcttgagatc | cgcaccctgg | gatcc | | | | 685 |

<210> 274
 <211> 222
 <212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (25)...(26)

<223> Xaa = Any amino acid

<400> 274

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Val | Lys | Leu | Ala | Leu | Cys | Val | Thr | Ala | Asn | Pro | Leu | Lys | Val |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Glu | Val | Thr | Val | Arg | Tyr | Gln | His | Xaa | Xaa | Val | Gly | Gln | Arg | Asn | Asp |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| His | Ala | Ser | Val | Glu | Gly | Ala | Thr | Leu | Ser | Asp | Gly | Gln | Leu | Lys | Asp |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Gly | Lys | Gly | Ile | Lys | Ile | Asp | Glu | Val | Val | Lys | Glu | Ala | Gln | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Leu | Arg | Leu | Ala | Cys | Lys | Lys | Thr | Met | Ser | Leu | Ala | Ser | Thr | Ala | Ile |
| 65 | | | | 70 | | | | | | 75 | | | | | 80 |
| Gly | Thr | Arg | Leu | Leu | Lys | Cys | Val | Lys | Cys | Cys | Gly | Lys | Thr | Gly | His |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| His | Arg | Pro | Ala | Asn | Cys | Thr | Arg | Gln | Lys | His | Leu | Ser | Ala | Asp | Ala |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Leu | Met | Ser | Thr | Gly | His | Gln | Ala | Tyr | Val | Cys | Pro | Val | Asn | Ser | Trp |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Tyr | Ala | Ala | Ala | Val | Pro | Phe | Phe | Asn | Asp | Ala | Ser | Ile | Met | Phe | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Lys | Leu | Leu | Arg | Ser | Val | Ala | Ile | Gly | Leu | Ile | Val | Gly | Ala | Ile | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Val | Ala | Met | Pro | Ser | Leu | Arg | Ser | Leu | Asn | Pro | Leu | Ser | Thr | Pro |
| | | | 165 | | | | | 170 | | | | | | 175 | |
| Gln | Phe | Asp | Ser | Thr | Asp | Glu | Thr | Pro | Ala | Ser | Tyr | Asn | Leu | Ala | Val |
| | | 180 | | | | | | 185 | | | | | 190 | | |
| Arg | Arg | Ala | Ala | Pro | Ala | Val | Val | Asn | Val | Tyr | Asn | Arg | Gly | Leu | Asn |
| | | 195 | | | | 200 | | | | | 205 | | | | |
| Thr | Asn | Ser | His | Asn | Gln | Leu | Glu | Ile | Arg | Thr | Leu | Gly | Ser | | |
| | 210 | | | | | 215 | | | | | 220 | | | | |

<210> 275

<211> 703

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (656)...(698)

<223> n = A, C, G, or T

<400> 275

cttcagcatc ttttactttc accagcgttt ctgggtggga tccctgttcc tgactgtctg 60

```

agatgaggct tagccaactc tggttcctgag tgaatctgcc cagcagatag ttaatagtaa 120
tccacccata ggcaccttcc tcttgtccag tgatgatctt ggcaccctgg aagtcaaagg 180
ggtagctctt aaggcttggt gacactgcag ccaggacctc gtctgccgat tggtcgcttt 240
ccattctaag caagcgcatt cctgctgtgg ctcccaggta gacaggagtc tggatgatgct 300
tggatggttg tatcagttcg gtggacagtt ccatgcattc ggccaggtag gcaccgattt 360
catctgtttt ctgagcatat tttgagattc caggaccttt cacttggcat tcctctaact 420
gctgcaccac ccctgtgtca ttctccttct cggccggcca cttgtagatg tacagggttg 480
tgtgagatga ccccgcatcc aacacaatcc cataactaac attttctggc aaagggttgt 540
tctgggtcag tcccacagca atcaaagcta tcacagccaa gatagagggtg aaaccaagga 600
tgatcaagaa tatttttgga gcaaaatctc ttcaccttag aatcctttat atcttncata 660
aggggcaagc tttttggttc ctttctcttc ctgcgtgnct tgg 703

```

<210> 276
 <211> 220
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (2)...(7)
 <223> Xaa = Any amino acid

<400> 276

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Xaa | Gln | Arg | Gly | Arg | Xaa | Arg | Asn | Gln | Lys | Ala | Cys | Pro | Leu | Xaa |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Lys | Ile | Arg | Ile | Leu | Arg | Arg | Asp | Phe | Ala | Pro | Lys | Ile | Phe | Leu | Ile |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ile | Leu | Gly | Phe | Thr | Ser | Ile | Leu | Ala | Val | Ile | Ala | Leu | Ile | Ala | Val |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Leu | Thr | Gln | Asn | Lys | Pro | Leu | Pro | Glu | Asn | Val | Lys | Tyr | Gly | Ile |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Val | Leu | Asp | Ala | Gly | Ser | Ser | His | Thr | Asn | Leu | Tyr | Ile | Tyr | Lys | Trp |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Pro | Ala | Glu | Lys | Glu | Asn | Asp | Thr | Gly | Val | Val | Gln | Gln | Leu | Glu | Glu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Gln | Val | Lys | Gly | Pro | Gly | Ile | Ser | Lys | Tyr | Ala | Gln | Lys | Thr | Asp |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Glu | Ile | Gly | Ala | Tyr | Leu | Ala | Glu | Cys | Met | Glu | Leu | Ser | Thr | Glu | Leu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Ile | Pro | Thr | Ser | Lys | His | His | Gln | Thr | Pro | Val | Tyr | Leu | Gly | Ala | Thr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ala | Gly | Met | Arg | Leu | Leu | Arg | Met | Glu | Ser | Glu | Gln | Ser | Ala | Asp | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Val | Leu | Ala | Ala | Val | Ser | Thr | Ser | Leu | Lys | Ser | Tyr | Pro | Phe | Asp | Phe |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Gln | Gly | Ala | Lys | Ile | Ile | Thr | Gly | Gln | Glu | Glu | Gly | Ala | Tyr | Gly | Trp |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ile | Thr | Ile | Asn | Tyr | Leu | Leu | Gly | Arg | Phe | Thr | Gln | Glu | Gln | Ser | Trp |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Leu | Ser | Leu | Ile | Ser | Asp | Ser | Gln | Glu | Gln | Gly | Ser | | | | |

210

215

220

<210> 277
 <211> 719
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (628)...(666)
 <223> n = A, C, G, or T

<400> 277
 cttcagcatc ttttctttca ccagcgtttc tgggtgggat ccaggggtgg ggtggaaaac 60
 ttgctaaaaa caaagcaaat gtctttcaat attcacaacc ttaaaattat atccaagaaa 120
 acaaaggata aataattttt tataaaaata attacttctc aaataacggt tcacaataga 180
 cctgctcaat acatcgatct gactcatctc atctgtgccg cttttcttct ttttaaaatt 240
 ctggcctggg acaaaaactac atgaaagaaa gtaccattaa attaagggtt actttccaaa 300
 aaacaataga aaaatcttaa aagtaaattc acttatatat aaaatattaa ggcctctgca 360
 tgagaacggt ttaacatctg gggaactggc ctttcctaac tgacctatga cccactcac 420
 ctcaaacttc agaatgaaag gttctggagt gaaaagtcct tttaattttg ccaatacatg 480
 aaattacaca taaaattaca ctgcaaagta atatgtactt aacaaatgat atattgaaaa 540
 gtctaacttt ctgctggcta atttcagtat ggacttcaga tcaagtatag tgtattttca 600
 gccatatctc ataatctttt gcgacgcn gn cgcaattca agcttactct tncctttttca 660
 attcanaaga actcgtcaag aaggcgatag aaggcgatgc gctgcgaatc gggagccgg 719

<210> 278
 <211> 219
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (17)...(28)
 <223> Xaa = Any amino acid

<400> 278
 Gly Ser Arg Phe Ala Ala His Arg Leu Leu Ser Pro Ser Arg Val Leu
 1 5 10 15
 Xaa Asn Lys Xaa Lys Ser Lys Leu Glu Phe Ala Xaa Ala Ser Gln Lys
 20 25 30
 Ile Met Arg Tyr Gly Lys Tyr Thr Ile Leu Asp Leu Lys Ser Ile Leu
 35 40 45
 Lys Leu Ala Ser Arg Lys Leu Asp Phe Ser Ile Tyr His Leu Leu Ser
 50 55 60
 Thr Tyr Tyr Phe Ala Val Phe Tyr Val Phe His Val Leu Ala Lys Leu
 65 70 75 80
 Lys Gly Leu Phe Thr Pro Glu Pro Phe Ile Leu Lys Phe Glu Val Ser
 85 90 95

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | Ile | Gly | Gln | Leu | Gly | Lys | Ala | Ser | Ser | Pro | Asp | Val | Lys | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Phe | Ser | Cys | Arg | Gly | Leu | Asn | Ile | Leu | Tyr | Ile | Ser | Glu | Phe | Thr | Phe |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Lys | Ile | Phe | Leu | Leu | Phe | Phe | Gly | Lys | Pro | Leu | Ile | Trp | Tyr | Phe | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ser | Cys | Ser | Phe | Val | Pro | Gly | Gln | Asn | Phe | Lys | Lys | Lys | Lys | Ser | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Thr | Asp | Glu | Met | Ser | Gln | Ile | Asp | Val | Leu | Ser | Arg | Ser | Ile | Val | Lys |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Arg | Tyr | Leu | Arg | Ser | Asn | Tyr | Phe | Tyr | Lys | Lys | Leu | Phe | Ile | Leu | Cys |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Phe | Leu | Gly | Tyr | Asn | Phe | Lys | Val | Val | Asn | Ile | Glu | Arg | His | Leu | Leu |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Cys | Phe | Gln | Val | Phe | His | Pro | Thr | Pro | Gly | Ser | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 279
 <211> 703
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (582)...(701)
 <223> n = A, C, G or T

<400> 279

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cttcgcatct | tttactttcc | cagcgtttct | gggtgggata | cagcagcaag | ttccaccatg | 60 |
| atgctctcac | cattctttgt | gatgaaagg | gtgatgaaga | caaagaacac | atcgtagatg | 120 |
| agaagaaggc | ctagcagtat | cacgcatgac | atgaaattgg | gtaacttcat | tgttttaatt | 180 |
| aagttgagac | agaaagcaat | tcctaagata | tcctgtaaaa | tccaagccca | cctatcctca | 240 |
| tttcgaaata | cagcccacac | aacagcaact | gagatgcaca | gcccggaag | gaaaatcagg | 300 |
| ctcactttaa | tgtttttgcc | acaacacaaa | atcgtgcact | gtccacatgg | catcctatga | 360 |
| atcaatgcag | aaagacagtt | gtacaggctc | attgacgatg | ctatgcagaa | aatcgctatc | 420 |
| ataacataca | caagccacct | gtagaagaaa | tacagtaaga | caatgtcgac | gcggccgcga | 480 |
| attcaagctt | actcttcctt | tttcaattca | gaagaactcg | tcaagaaggc | gatagaaggc | 540 |
| gatgcgctgc | gaatcgggag | cggcgatacc | gtaaagcacg | angaagcgg | caggccattc | 600 |
| gccgncaagc | tcttcacaat | atcacgggta | gncaacgcta | tgtcctgata | gcggtccgnc | 660 |
| acacccagcc | cggncacagt | cgatgaatnc | agaaaagcgg | nct | | 703 |

<210> 280
 <211> 220
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (1)...(33)

<223> Xaa = Any amino acid

<400> 280

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Ala | Phe | Leu | Xaa | Ser | Ser | Thr | Val | Xaa | Gly | Leu | Gly | Val | Xaa | Asp |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Arg | Tyr | Gln | Asp | Ile | Ala | Leu | Xaa | Thr | Arg | Asp | Ile | Val | Lys | Ser | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Xaa | Ala | Asn | Gly | Leu | Thr | Ala | Ser | Ser | Cys | Phe | Thr | Val | Ser | Pro | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Pro | Ile | Arg | Ser | Ala | Ser | Pro | Ser | Ile | Ala | Phe | Leu | Thr | Ser | Ser | Ser |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Glu | Leu | Lys | Lys | Glu | Glu | Ala | Ile | Arg | Gly | Arg | Val | Asp | Ile | Val | Leu |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Tyr | Phe | Phe | Tyr | Arg | Trp | Leu | Val | Tyr | Val | Met | Ile | Ala | Ile | Phe |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Cys | Ile | Ala | Ser | Ser | Met | Ser | Leu | Tyr | Asn | Cys | Leu | Ser | Ala | Leu | Ile |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| His | Arg | Met | Pro | Cys | Gly | Gln | Cys | Thr | Ile | Leu | Cys | Cys | Gly | Lys | Asn |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Ile | Lys | Val | Ser | Leu | Ile | Phe | Leu | Ser | Gly | Leu | Cys | Ile | Ser | Val | Ala |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Val | Trp | Ala | Val | Phe | Arg | Asn | Glu | Asp | Arg | Trp | Ala | Trp | Ile | Leu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gln | Asp | Ile | Leu | Gly | Ile | Ala | Phe | Cys | Leu | Asn | Leu | Ile | Lys | Thr | Met |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Lys | Leu | Pro | Asn | Phe | Met | Ser | Cys | Val | Ile | Leu | Leu | Gly | Leu | Leu | Leu |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ile | Tyr | Asp | Val | Phe | Phe | Val | Phe | Ile | Thr | Pro | Phe | Ile | Thr | Lys | Asn |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Gly | Glu | Ser | Ile | Met | Val | Glu | Leu | Ala | Ala | Gly | Ser | | | | |
| | 210 | | | | | 215 | | | | | 220 | | | | |

<210> 281

<211> 722

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (698)...(698)

<223> n = A, C, G, or T

<400> 281

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| cttcagcatc | ttttactttc | accagcggtt | ctgggtggga | tcctgtcgat | gtgacccat | 60 |
| gactaggtaa | gtgtgggttc | actttaacgt | aaatatcatt | cttccagaca | tatgccaaact | 120 |
| tatgaccttc | tggtgaccat | gtgatccact | gtgtattatt | tggaatcttc | tcttctgtga | 180 |
| tcagctgtct | tttattcaca | tcataaatgt | tgtatgaagc | tgtgtaggaa | tgtctccatt | 240 |
| gcttcacgta | gttgatttcc | aagagaacaa | acagtcgggc | aggtgacact | gaatgatatc | 300 |
| caaagctttc | aaaggtactg | ttctccaaga | aaatggagct | gtttccatgt | tcagcattga | 360 |

```

gcagcaagat attgttctct tgtttgtaga ggtattcaaa gtctgaaacc caccacaaag 420
agtaggactt gacccgaaag gtactcttta aatagtcagc tagtgaatac gttctgcggc 480
tgtcagctgc cgcttcatct ttgctcagca gaactattgg cacggtgatg atggtgacaa 540
gcgagcgac accaagcagt cccagaagaa ccttccacgg tgtcttcatg gtcgggcggc 600
tccttgaaac tgaactctga agcttgagcg cagcagaagt cactgcgcgc agagacggac 660
gtccgtcgac gccggccgcg aattcaagct tactcttnct ttttcaattc agaagaactc 720
gt

```

<210> 282
 <211> 227
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (7)...(7)
 <223> Xaa = Any amino acid

<400> 282

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Val | Leu | Leu | Asn | Lys | Xaa | Lys | Ser | Lys | Leu | Glu | Phe | Ala | Ala | Gly | 1 | 5 | 10 | 15 |
| Val | Asp | Gly | Arg | Pro | Ser | Leu | Arg | Ala | Val | Thr | Ser | Ala | Ala | Leu | Lys | 20 | 25 | 30 | |
| Leu | Gln | Ser | Ser | Val | Ser | Arg | Ser | Arg | Pro | Thr | Met | Lys | Thr | Pro | Trp | 35 | 40 | 45 | |
| Lys | Val | Leu | Leu | Gly | Leu | Leu | Gly | Val | Ala | Ala | Leu | Val | Thr | Ile | Ile | 50 | 55 | 60 | |
| Thr | Val | Pro | Ile | Val | Leu | Leu | Ser | Lys | Asp | Glu | Ala | Ala | Ala | Asp | Ser | 65 | 70 | 75 | 80 |
| Arg | Arg | Thr | Tyr | Ser | Leu | Ala | Asp | Tyr | Leu | Lys | Ser | Thr | Phe | Arg | Val | 85 | 90 | 95 | |
| Lys | Ser | Tyr | Ser | Leu | Trp | Trp | Val | Ser | Asp | Phe | Glu | Tyr | Leu | Tyr | Lys | 100 | 105 | 110 | |
| Gln | Glu | Asn | Asn | Ile | Leu | Leu | Leu | Asn | Ala | Glu | His | Gly | Asn | Ser | Ser | 115 | 120 | 125 | |
| Ile | Phe | Leu | Glu | Asn | Ser | Thr | Phe | Glu | Ser | Phe | Gly | Tyr | His | Ser | Val | 130 | 135 | 140 | |
| Ser | Pro | Asp | Arg | Leu | Phe | Val | Leu | Leu | Glu | Tyr | Asn | Tyr | Val | Lys | Gln | 145 | 150 | 155 | 160 |
| Trp | Arg | His | Ser | Tyr | Thr | Ala | Ser | Tyr | Asn | Ile | Tyr | Asp | Val | Asn | Lys | 165 | 170 | 175 | |
| Arg | Gln | Leu | Ile | Thr | Glu | Glu | Lys | Ile | Pro | Asn | Asn | Thr | Gln | Trp | Ile | 180 | 185 | 190 | |
| Thr | Trp | Ser | Pro | Glu | Gly | His | Lys | Leu | Ala | Tyr | Val | Trp | Lys | Asn | Asp | 195 | 200 | 205 | |
| Ile | Tyr | Val | Lys | Val | Glu | Pro | His | Leu | Pro | Ser | His | Arg | Ile | Thr | Ser | 210 | 215 | 220 | |
| Thr | Gly | Ser | | | | | | | | | | | | | | 225 | | | |

<210> 283
 <211> 701
 <212> DNA
 <213> Mus musculus

 <220>
 <221> unsure
 <222> (558)...(701)
 <223> n = A, C, G or T

<400> 283
 cttcagcatc ttttactttc accagcggtt ctgggtggga tccggtttctt ttctctaaat 60
 ctttaattct gaactggcct tgagcgggct tgctttcctt gtctttatag taggcaatga 120
 gttgaactgt gtagttctgc tctggcagaa ggccttgaat aatcgctttt gttgcagtgt 180
 tctggagatt catctgggtg gtctttcctc ctgaagctgg agccacgagc agtttgtagc 240
 caccaaattt ccctcttggt gctttccatg aaatctgtat actatcatgg gaaatcacat 300
 tatatcttaa ccttgtgggt ggagccactt gtcccctgac aatgggtgcag aaacaagcag 360
 ccgccaaaaa agctagaatc agccagtccc gcactcttgc ctgccaaatc atcatcttat 420
 tttctgcctc ttacatcagg tgcaacagct gcctgtgcag ggcaacgttc cagcccaggt 480
 tggggacctc ttggcgccta gggaagatta agtcgacgcg gccgcgaatt caagcttact 540
 cttccttttt caattcanaa gaactcgtca agaangcgat agaaggcgat gcgctgcgaa 600
 tcgggagcgg cgatcccgtg aagcacgagg aagcggncag cccattcgcc gncaagctct 660
 tnagcaatat cacgggtagc caacgctatg tncatgatagc n 701

<210> 284
 <211> 217
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (3)...(47)
 <223> Xaa = Any amino acid

<400> 284
 Ala Ile Xaa Thr Arg Trp Leu Pro Val Ile Leu Leu Lys Ser Leu Xaa
 1 5 10 15
 Ala Asn Gly Leu Xaa Ala Ser Ser Cys Phe Thr Gly Ser Pro Leu Pro
 20 25 30
 Ile Arg Ser Ala Ser Pro Ser Ile Ala Phe Leu Thr Ser Ser Xaa Glu
 35 40 45
 Leu Lys Lys Glu Glu Ala Ile Arg Gly Arg Val Asp Leu Ile Phe Pro
 50 55 60
 Arg Arg Gln Glu Val Pro Asn Leu Gly Trp Asn Val Ala Leu His Arg
 65 70 75 80
 Gln Leu Leu His Leu Met Glu Ala Glu Asn Lys Met Met Ile Trp Gln
 85 90 95
 Cys Lys Met Arg Asp Trp Leu Ile Leu Ala Phe Leu Ala Ala Cys
 100 105 110

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Cys | Thr | Ile | Val | Arg | Gly | Gln | Val | Ala | Pro | Pro | Thr | Arg | Leu | Arg |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Tyr | Asn | Val | Ile | Ser | His | Asp | Ser | Ile | Gln | Ile | Ser | Trp | Lys | Ala | Pro |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Arg | Gly | Lys | Phe | Gly | Gly | Tyr | Lys | Leu | Leu | Val | Ala | Pro | Ala | Ser | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gly | Lys | Thr | Asn | Gln | Met | Asn | Leu | Gln | Asn | Thr | Ala | Thr | Lys | Ala | Ile |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ile | Gln | Gly | Leu | Leu | Pro | Glu | Gln | Asn | Tyr | Thr | Val | Gln | Leu | Ile | Ala |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Tyr | Tyr | Lys | Asp | Lys | Glu | Ser | Lys | Pro | Ala | Gln | Gly | Gln | Phe | Arg | Ile |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Lys | Asp | Leu | Glu | Lys | Arg | Asn | Gly | Ser | | | | | | | |
| | 210 | | | | | 215 | | | | | | | | | |

<210> 285
 <211> 723
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (600)...(707)
 <223> n= A, C, G or T

<400> 285

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cttcgcatct | tttactttca | ccagcgtttc | tgggtgggat | ccgagcataa | ataagacaga | 60 |
| gaaaatccat | ggatataagt | attcttgcag | gcaacaccac | atagacattt | agaaaattac | 120 |
| ttaagtgttt | tttgaatttt | tactttacat | gacttcatta | attgtacttc | cattaaagaa | 180 |
| gagtttgtaa | cacatctgta | aacaaaaaag | gcatatagca | ttctattctt | aatgaagaaa | 240 |
| gaacatat | aaccacaaag | taaaggaata | atcacaataa | aaagaagagc | tttagctcat | 300 |
| gaatatatat | attgagtga | tgaataaata | tatggtcgac | gcggccgcga | attcaagctt | 360 |
| actcttcctt | tttcaattca | gaagaactcg | tcaagaaggc | gatagaaggc | gatgcgctgc | 420 |
| gaatcgggag | cggcgatacc | gtaaagcacg | aggaagcggt | cagcccattc | gccgccaagc | 480 |
| tcttcagcaa | tatcacgggt | agccaacgct | atgtcctgat | agcgggtccg | cacaccacgc | 540 |
| cggccacagt | cgatgaatcc | agaaaagcgg | ccattttcca | ccatgatatt | cggcaagcan | 600 |
| gcatcgccat | gggtcacgac | gagatcctcg | ccgtcgggca | tgcgcgcctt | gagcctggcg | 660 |
| aacagttcgg | ctggcgcgag | cccctgatgc | tcttcgtcca | gatcatnctg | atcggcaaga | 720 |
| ccg | | | | | | 723 |

<210> 286
 <211> 217
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (6)...(41)
 <223> Xaa = Any amino acid

<400> 286

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Ser | Cys | Arg | Ser | Xaa | Ser | Gly | Arg | Arg | Ala | Ser | Gly | Ala | Arg | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ser | Arg | Thr | Val | Arg | Gln | Ala | Gln | Gly | Ala | His | Ala | Arg | Arg | Arg | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Ser | Arg | Arg | Asp | Pro | Trp | Arg | Cys | Xaa | Leu | Ala | Glu | Tyr | His | Gly | Gly |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Lys | Trp | Pro | Leu | Phe | Trp | Ile | His | Arg | Leu | Trp | Pro | Ala | Gly | Cys | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Pro | Leu | Ser | Gly | His | Ser | Val | Gly | Tyr | Pro | Tyr | Cys | Arg | Ala | Trp |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Arg | Arg | Met | Gly | Pro | Leu | Pro | Arg | Ala | Leu | Arg | Tyr | Arg | Arg | Ser | Arg |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Phe | Ala | Ala | His | Arg | Leu | Leu | Ser | Pro | Ser | Arg | Val | Leu | Leu | Asn | Lys |
| | | | 100 | | | | | 105 | | | | | | 110 | |
| Arg | Lys | Ser | Lys | Leu | Glu | Phe | Ala | Ala | Ala | Ser | Thr | Ile | Tyr | Leu | Phe |
| | | 115 | | | | | 120 | | | | | | 125 | | |
| Ile | His | Ser | Ile | Tyr | Ile | Phe | Met | Ser | Ser | Ser | Ser | Phe | Tyr | Cys | Asp |
| | 130 | | | | | 135 | | | | | | 140 | | | |
| Tyr | Ser | Phe | Thr | Leu | Trp | Leu | Asn | Met | Phe | Phe | Leu | His | Glu | Asn | Ala |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ile | Cys | Leu | Phe | Cys | Leu | Gln | Met | Cys | Tyr | Lys | Leu | Phe | Phe | Asn | Gly |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ser | Thr | Ile | Asn | Glu | Val | Met | Ser | Lys | Asn | Ser | Lys | Asn | Thr | Val | Ile |
| | | | 180 | | | | | 185 | | | | | | 190 | |
| Phe | Met | Ser | Met | Trp | Cys | Cys | Leu | Gln | Glu | Tyr | Leu | Tyr | Pro | Trp | Ile |
| | | 195 | | | | | 200 | | | | | | 205 | | |
| Phe | Ser | Val | Leu | Phe | Met | Leu | Gly | Ser | | | | | | | |
| | 210 | | | | | | 215 | | | | | | | | |

<210> 287

<211> 705

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (655)...(655)

<223> n= A, C, G or T

<400> 287

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| cttcagcatc | ttttactttc | accagcgttt | ctgggtggga | tccgggggtgt | gttactggca | 60 |
| tctatggagt | agatgtaagt | aatggtgata | aacagcctat | aatgcacagc | atagcctgac | 120 |
| ccccaaaaga | agtatacatc | ccagaatatc | aatggtacag | agattgagaa | aactctcatt | 180 |
| gagggcctag | ttgtatttct | tggtcaagac | aaggttacaa | catttcaatt | aagagagttc | 240 |
| agctctacaa | agaagtttta | gtcgacgcgg | ccgcgaattc | aagcttactc | ttcctttttc | 300 |
| aattcagaag | aactcgtcaa | gaaggcgata | gaaggcgatg | cgctgcgaat | cgggagcggc | 360 |
| gataccgtaa | agcacgagga | agcggtcagc | ccattcgcgc | ccaagctctt | cagcaatatc | 420 |

```

acgggtagcc aacgctatgt cctgatagcg gtccgccaca cccagccggc cacagtcgat 480
gaatccagaa aagcggccat tttccaccat gatattcggc aagcaggcat cgccatgggt 540
cacgacgaga tcctcgccgt cgggcatgcg cgccttgagc ctggcgaaca gttcggctgg 600
cgcgagcccc tgatgctctt cgtccagatc atcctgatcg acaaagaccg gcttncatcc 660
gagtacgtgc tcgctcgatg cgatgtttcg cttggtggtc gaatg 705

```

<210> 288
 <211> 222
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (17)...(17)
 <223> Xaa = Any amino acid

<400> 288

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Asp | His | Gln | Ala | Lys | His | Arg | Ile | Glu | Arg | Ala | Arg | Thr | Arg | Met |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Xaa | Ala | Gly | Leu | Cys | Arg | Ser | Gly | Ser | Gly | Arg | Arg | Ala | Ser | Gly | Ala |
| | | 20 | | | | | 25 | | | | | | 30 | | |
| Arg | Ala | Ser | Arg | Thr | Val | Arg | Gln | Ala | Gln | Gly | Ala | His | Ala | Arg | Arg |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Arg | Gly | Ser | Arg | Arg | Asp | Pro | Trp | Arg | Cys | Leu | Leu | Ala | Glu | Tyr | His |
| | 50 | | | | 55 | | | | | | 60 | | | | |
| Gly | Gly | Lys | Trp | Pro | Leu | Phe | Trp | Ile | His | Arg | Leu | Trp | Pro | Ala | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Cys | Gly | Gly | Pro | Leu | Ser | Gly | His | Ser | Val | Gly | Tyr | Pro | Tyr | Cys | Arg |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Ala | Trp | Arg | Arg | Met | Gly | Pro | Leu | Pro | Arg | Ala | Leu | Arg | Tyr | Arg | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Ser | Arg | Phe | Ala | Ala | His | Arg | Leu | Leu | Ser | Pro | Ser | Arg | Val | Leu | Leu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Asn | Lys | Arg | Lys | Ser | Lys | Leu | Glu | Phe | Ala | Ala | Ala | Ser | Thr | Lys | Thr |
| | 130 | | | | | 135 | | | | | | 140 | | | |
| Ser | Leu | Ser | Thr | Leu | Leu | Ile | Glu | Met | Leu | Pro | Cys | Leu | Glu | Gln | Glu |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ile | Gln | Leu | Gly | Pro | Gln | Glu | Phe | Ser | Gln | Ser | Leu | Tyr | His | Tyr | Ser |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Gly | Met | Tyr | Thr | Ser | Phe | Gly | Gly | Gln | Ala | Met | Leu | Cys | Ile | Ile | Gly |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Cys | Leu | Ser | Thr | Leu | Leu | Thr | Ser | Thr | Pro | Met | Pro | Val | Thr | His | Pro |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Gly | Ser | His | Pro | Glu | Thr | Leu | Val | Lys | Val | Lys | Asp | Ala | Glu | | |
| | 210 | | | | | 215 | | | | | 220 | | | | |

<210> 289
 <211> 722
 <212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (702)...(722)

<223> n= A, C, G or T

<400> 289

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cttcagcatc ttttactttc accagcgttt ctgggtggga tcccaggagt tttccttcgc 60
tgataaaggg ttctgggaag caggtagcag cagagatggg acagacagca tctcccacat 120
agaaaataca cccattatc atcatttttc caaaacgagg ttcaatgggg agtttagcca 180
ggattcgtcc aagaggagtc aactcatcat tggcatctaa agcatcaagt tctcttagag 240
tatgctctgc ttcaattaca gcatccaaag gtggagggttc gattgccttt gcaaggaatt 300
ggccaattcc tcttagacgc agaagtttta tgctcagagc aatttcatgc aatggtgttc 360
taaacatctc tgggtgtcatg tgggtctcta gtctaaaatt tagaagtaga aaagtcaaac 420
atgacaacat aacaaaaatc tttgcataaa aaaactgggt attatagtgg ccctttccta 480
gtctatacca cacaactttt cctattgact acaaaactag actagttgac tgaaaactgg 540
ctcctgactt tactttcaca gccagggtat cttttaactg ataagtagag gagtaaggaa 600
aaaagttaat gctaacactt ctaactatgg ctactaccta ccgatacctac ctattaacaa 660
gcacggacaa caacaaaacg ggcccaaact cagcaaaaagg cnggacataa atataataaa 720
cn 722
```

<210> 290

<211> 237

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (7)...(7)

<223> Xaa = Any amino acid

<400> 290

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Val Tyr Tyr Ile Tyr Val Xaa Pro Phe Ala Glu Phe Gly Pro Val Leu
 1      5      10      15
Leu Leu Ser Val Leu Val Asn Arg Asp Arg Val Val Ala Ile Val Arg
 20      25      30
Ser Val Ser Ile Asn Phe Phe Pro Tyr Ser Ser Thr Tyr Gln Leu Lys
 35      40      45
Asp Thr Leu Ala Val Lys Val Lys Ser Gly Ala Ser Phe Gln Ser Thr
 50      55      60
Ser Leu Val Leu Ser Ile Gly Lys Val Val Trp Tyr Arg Leu Gly Lys
 65      70      75      80
Gly His Tyr Asn Thr Gln Phe Phe Tyr Ala Lys Ile Phe Val Met Leu
 85      90      95
Ser Cys Leu Thr Phe Leu Leu Leu Asn Phe Arg Leu Glu Thr His Met
 100     105     110
Thr Pro Glu Met Phe Arg Thr Pro Leu His Glu Ile Ala Leu Ser Ile
 115     120     125
Lys Leu Leu Arg Leu Gly Gly Ile Gly Gln Phe Leu Ala Lys Ala Ile
```

| | | | | |
|-------------------------|-------------------------|---------------------|-----|-----|
| 130 | | 135 | | 140 |
| Glu Pro Pro Pro Leu Asp | Ala Val Ile Glu Ala | Glu His Thr Leu Arg | | |
| 145 | 150 | 155 | 160 | |
| Glu Leu Asp Ala Leu Asp | Ala Asn Asp Glu Leu Thr | Pro Leu Gly Arg | | |
| | 165 | 170 | 175 | |
| Ile Leu Ala Lys Leu Pro | Ile Glu Pro Arg Phe | Gly Lys Met Met Ile | | |
| | 180 | 185 | 190 | |
| Met Gly Cys Ile Phe Tyr | Val Gly Asp Ala Val | Cys Thr Ile Ser Ala | | |
| | 195 | 200 | 205 | |
| Ala Thr Cys Phe Pro Glu | Pro Phe Ile Ser Glu | Gly Lys Leu Leu Gly | | |
| | 210 | 215 | 220 | |
| Ser His Pro Glu Thr Leu | Val Lys Val Lys Asp | Ala Glu | | |
| 225 | 230 | 235 | | |

<210> 291
 <211> 703
 <212> DNA
 <213> Mus musculus

 <220>
 <221> unsure
 <222> (547)...(702)
 <223> n= A, C, G or T

<400> 291
 cttcagcatc ttttactttc accagcggtt ctgggtggga tccactcttg ctacccaact 60
 gtttgtggaa gaaagtcttg agctgctgcc atgcgtccac ctgggccacg gcatgagccc 120
 tgggctcccc tccaaagggt atgttggcac ccaccaggag gtgcatgcca gcgctgcaca 180
 gcgggaagta agggggctcg atgtaatgcc ctgctgctgg gtagcagatg atctggggct 240
 tctccttccc gtgcgcctgc aggcgttttg agatctcatc agcatagaac tcgctcttcc 300
 agttgtggtc gtcctgacct acgaggaaca ggaaggctcg gtcagacctt tccacgggaa 360
 tgaagctctt cttgtctacc agagggcttt gcagagcttc caccgacatcc aagagaccat 420
 ctttgggtcat tttgacttgg tttctcagaa gggacacagg gggatatagtc tcatccttgt 480
 aggagatggg gttcccaaca gcagccacgg agccattgat gaccacagca gctgtgatgc 540
 ccttcangaa ggaggccata ncaaggccaa gttcaccccc tttggaaatc ccaagcagcc 600
 caattccagg tccttttacc tcgggggtggc tgcgchangta gttcacggct tcttcaaagt 660
 actccatgtg catgggtttct atgctcttgg ggaaggctcg cnt 703

<210> 292
 <211> 703
 <212> DNA
 <213> Mus musculus

 <220>
 <221> unsure
 <222> (695)...(695)
 <223> n= A, C, G or T

<400> 292

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cttcagcatc ttttactttc accagcgttt ctgggtggga tccactcttg ctacccaact 60
gtttgtggaa gaaagtctgg agctgctgcc atgcgtccac ctgggccacg gcatgagccc 120
tgggctcccc tccaaagggtg atgttggcac ccaccaggag gtgcatgcca gcgctgcaca 180
gcgggaagta agggggctcg atgtaatgcc ctgctgctgg gtagcagatg atctggggct 240
tctccttccc gtgcgcctgc aggcgttttg agatctcatc agcatagaac tcgctcttcc 300
agttgtggtc gtcctgacct acgaggaaca ggaaggctcg gtcagacctt tccacgggaa 360
tgaagctctt cttgtctacc agagggcttt gcagagcttc cacgacatcc aagagacccat 420
ctttgggtcat tttgacttgg tttctcagaa gggacacagg gggatatagtc tcatccttgt 480
aggagatggg gttcccaaca gcagccacgg agccattgat gaccacagca gctgtgatgc 540
ccttcaggaa ggaggccata gcaaggccaa gttcaccccc tttggaaatc ccaagcagcc 600
caattccagg tcctttttacc tcgggggtggc tgcgcaggta gttcacggct tcttcaaaag 660
tactccatgt gcatgggttc tatgctcttg gggangtcgt cgt 703

```

<210> 293

<211> 231

<212> PRT

<213> Mus musculus

<400> 293

```

Thr Ser Pro Arg Ala Lys Pro Cys Thr Trp Ser Thr Phe Glu Glu Ala
1      5      10      15
Val Asn Tyr Leu Arg Ser His Pro Glu Val Lys Gly Pro Gly Ile Gly
20     25     30
Leu Leu Gly Ile Ser Lys Gly Gly Glu Leu Gly Leu Ala Met Ala Ser
35     40     45
Phe Leu Lys Gly Ile Thr Ala Ala Val Val Ile Asn Gly Ser Val Ala
50     55     60
Ala Val Gly Asn Thr Ile Ser Tyr Lys Asp Glu Thr Ile Pro Pro Val
65     70     75     80
Ser Leu Leu Arg Asn Gln Val Lys Met Thr Lys Asp Gly Leu Leu Asp
85     90     95
Val Val Glu Ala Leu Gln Ser Pro Leu Val Asp Lys Lys Ser Phe Ile
100    105    110
Pro Val Glu Arg Ser Asp Thr Thr Phe Leu Phe Leu Val Gly Gln Asp
115    120    125
Asp His Asn Trp Lys Ser Glu Phe Tyr Ala Asp Glu Ile Ser Lys Arg
130    135    140
Leu Gln Ala His Gly Lys Glu Lys Pro Gln Ile Ile Cys Tyr Pro Ala
145    150    155    160
Ala Gly His Tyr Ile Glu Pro Pro Tyr Phe Pro Leu Cys Ser Ala Gly
165    170    175
Met His Leu Leu Val Gly Ala Asn Ile Thr Phe Gly Gly Glu Pro Arg
180    185    190
Ala His Ala Val Ala Gln Val Asp Ala Trp Gln Gln Leu Gln Thr Phe
195    200    205
Phe His Lys Gln Leu Gly Ser Lys Ser Gly Ser His Pro Glu Thr Leu
210    215    220
Val Lys Val Lys Asp Ala Glu
225    230

```

<210> 294
 <211> 623
 <212> DNA
 <213> Mus musculus

<400> 294
 gaattcgcgg cccggcgtcga cgaaacagga tctcccttct ctgctcagag atgagcaa at 60
 gccataatta cgacctcaag ccagcaaagt gggatacttc tcaagaacaa cagaaacaaa 120
 gattagcact aactaccagt caacctggag aaaatggat cataagagga agatacccta 180
 tagaaaaact caaaatatct ccaatgttcg ttgttcgagt ccttgctata gccttggcaa 240
 ttcgattcac ccttaacaca ttgatgtggc ttgccatttt caaagagacg tttcagccag 300
 tattgtgcaa caaggaagtc ccagtttcct caagagaggg ctactgtggc ccattgcccta 360
 acaactggat atgtcacaga aacaactgtt accaattttt taatgaagag aaaacctgga 420
 accagagcca agcttcctgt ttgtctcaaa attccagcct tctgaagata tacagtaaag 480
 aagaacagga tttcttaaaag ctgggttaagt cctatcactg gatgggactg gtccagatcc 540
 cagcaaatgg ctcttggcag tgggaagatg gctcctctct ctcatacaat cagttaactc 600
 tgggtggaat accaaaagga tcc 623

<210> 295
 <211> 226
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (17)...(17)
 <223> Xaa = Any amino acid

<400> 295
 Ala Ser Pro Ser Ile Ala Phe Leu Thr Ser Ser Ser Glu Leu Lys Lys
 1 5 10 15
 Xaa Glu Ala Ile Arg Gly Arg Arg Arg Asn Arg Ile Ser Leu Leu
 20 25 30
 Cys Ser Glu Met Ser Lys Cys His Asn Tyr Asp Leu Lys Pro Ala Lys
 35 40 45
 Trp Asp Thr Ser Gln Glu Gln Gln Lys Gln Arg Leu Ala Leu Thr Thr
 50 55 60
 Ser Gln Pro Gly Glu Asn Gly Ile Ile Arg Gly Arg Tyr Pro Ile Glu
 65 70 75 80
 Lys Leu Lys Ile Ser Pro Met Phe Val Val Arg Val Leu Ala Ile Ala
 85 90 95
 Leu Ala Ile Arg Phe Thr Leu Asn Thr Leu Met Trp Leu Ala Ile Phe
 100 105 110
 Lys Glu Thr Phe Gln Pro Val Leu Cys Asn Lys Glu Val Pro Val Ser
 115 120 125
 Ser Arg Glu Gly Tyr Cys Gly Pro Cys Pro Asn Asn Trp Ile Cys His
 130 135 140
 Arg Asn Asn Cys Tyr Gln Phe Phe Asn Glu Glu Lys Thr Trp Asn Gln
 145 150 155 160

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gln | Ala | Ser | Cys | Leu | Ser | Gln | Asn | Ser | Ser | Leu | Leu | Lys | Ile | Tyr |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Ser | Lys | Glu | Glu | Gln | Asp | Phe | Leu | Lys | Leu | Val | Lys | Ser | Tyr | His | Trp |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Met | Gly | Leu | Val | Gln | Ile | Pro | Ala | Asn | Gly | Ser | Trp | Gln | Trp | Glu | Asp |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Gly | Ser | Ser | Leu | Ser | Tyr | Asn | Gln | Leu | Thr | Leu | Val | Glu | Ile | Pro | Lys |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Gly | Ser | | | | | | | | | | | | | | |
| 225 | | | | | | | | | | | | | | | |

<210> 296

<211> 317

<212> DNA

<213> Mus musculus

<400> 296

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|-----|
| gaattcgcgg | cgcgcgtcgac | cagctgtgtg | ctgccctgct | tctgctcaac | ctgatcttcc | 60 |
| tcctagactc | ctggattgcg | ctgtataata | cccgagggtt | ctgcattgcc | gtggctgtat | 120 |
| ttcttcacta | ttttctcttg | gtctcattca | catggatggg | attagaagca | ttccacatgt | 180 |
| acctagcact | ggtcaagggtg | tttaataactt | acatccgaaa | gtacatcctt | aaattctgca | 240 |
| ttgttggtg | gggcataacca | gctgtggttg | tgtccatcgt | cctgactata | tccccagata | 300 |
| actatgggat | tggatcc | | | | | 317 |

<210> 297

<211> 232

<212> PRT

<213> Mus musculus

<220>

<221> UNSURE

<222> (2)...(23)

<223> Xaa = Any amino acid

<400> 297

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Xaa | Thr | Lys | Ser | Ile | Arg | Gly | Ser | Arg | Gln | Pro | Asn | Cys | Ser | Pro |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |
| Gly | Ser | Arg | Arg | Ala | Cys | Xaa | Thr | Ala | Arg | Ile | Ser | Ser | Pro | Met | Ala |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Met | Pro | Ala | Cys | Arg | Ile | Ser | Trp | Trp | Lys | Met | Ala | Ala | Phe | Leu | Asp |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Ser | Ser | Thr | Val | Ala | Gly | Trp | Val | Trp | Arg | Thr | Ala | Ile | Arg | Thr | Arg |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Trp | Leu | Pro | Val | Ile | Leu | Leu | Lys | Ser | Leu | Ala | Ala | Asn | Gly | Leu | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Ala | Ser | Ser | Cys | Phe | Thr | Val | Ser | Pro | Leu | Pro | Ile | Arg | Ser | Ala | Ser |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Pro | Ser | Ile | Ala | Phe | Leu | Thr | Ser | Ser | Glu | Leu | Lys | Lys | Glu | Glu | |
| | | | 100 | | | | 105 | | | | | 110 | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ile | Arg | Gly | Arg | Val | Asp | Gln | Leu | Cys | Ala | Ala | Leu | Leu | Leu | Leu |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Asn | Leu | Ile | Phe | Leu | Leu | Asp | Ser | Trp | Ile | Ala | Leu | Tyr | Asn | Thr | Arg |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Gly | Phe | Cys | Ile | Ala | Val | Ala | Val | Phe | Leu | His | Tyr | Phe | Leu | Leu | Val |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ser | Phe | Thr | Trp | Met | Gly | Leu | Glu | Ala | Phe | His | Met | Tyr | Leu | Ala | Leu |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Val | Lys | Val | Phe | Asn | Thr | Tyr | Ile | Arg | Lys | Tyr | Ile | Leu | Lys | Phe | Cys |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Ile | Val | Gly | Trp | Gly | Ile | Pro | Ala | Val | Val | Val | Ser | Ile | Val | Leu | Thr |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Ile | Ser | Pro | Asp | Asn | Tyr | Gly | Ile | Gly | Ser | His | Pro | Glu | Thr | Leu | Val |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Lys | Val | Lys | Asp | Ala | Glu | Asp | Gln | | | | | | | | |
| 225 | | | | | 230 | | | | | | | | | | |

<210> 298
 <211> 686
 <212> DNA
 <213> Mus musculus

<220>
 <221> unsure
 <222> (5)...(5)
 <223> n= A, C, G or T

<400> 298

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|------------|-----|
| tcttntagtt | tgacaggcaa | catcccaaaa | acttttgcgaa | gcattttgttc | agatcttcag | 60 |
| tattttccag | ttttcataca | gtctcgggggt | ttcaaaacgt | tgaaatcaag | gacacgacgt | 120 |
| ttgcagtcta | cctctgaaag | attagtagaa | gcacagaata | tagcccatca | tttgtgaagg | 180 |
| ggtttctttt | gcgggacaga | ggaacagatc | ttgagagttt | ggacaaactt | atgaaaacta | 240 |
| aaaacatacc | tgaagctcac | caagatgcat | ttaaaactgg | ttttgcagag | ggttttctca | 300 |
| aagctcaagc | tcttacacag | aagaccaatg | attccttaag | gcgaactcgt | ctgatcctct | 360 |
| ttgttttgct | cctgtttggc | atttatggac | tcttaaaaaa | tccgttttta | tctgtgcgct | 420 |
| ttcggacaac | tacaggactt | gattctgcgg | tagaccctgt | ccagatgaaa | aatgtcactt | 480 |
| ttgaacatgt | taaaggggtg | gaggaagcca | aacaagagtt | acaggaagtg | gttgaattct | 540 |
| tgaaaaatcc | acagaagttt | actgtgcttg | gaggtaaact | tcccaaagga | attcttttag | 600 |
| ttggggccacc | aggaacaggg | aagacgcttc | ttgcccgagc | tgtggcagga | gaagctgacg | 660 |
| tcccttttta | ttatgcttct | ggatcc | | | | 686 |

<210> 299
 <211> 237
 <212> PRT
 <213> Mus musculus

<220>
 <221> UNSURE
 <222> (1)...(1)

<223> Xaa = Any amino acid

<400> 299

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Phe | Asp | Arg | Gln | His | Pro | Lys | Asn | Phe | Ser | Lys | His | Leu | Phe | Arg |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Ser | Ser | Val | Phe | Ser | Ser | Phe | His | Thr | Val | Ser | Gly | Phe | Gln | Asn | Val |
| | | 20 | | | | | | 25 | | | | | 30 | | |
| Glu | Ile | Lys | Asp | Thr | Thr | Phe | Ala | Val | Tyr | Leu | Lys | Ile | Ser | Arg | Ser |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Thr | Glu | Tyr | Ser | Pro | Ser | Phe | Val | Lys | Gly | Phe | Leu | Leu | Arg | Asp | Arg |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Thr | Asp | Leu | Glu | Ser | Leu | Asp | Lys | Leu | Met | Lys | Thr | Lys | Asn | Ile |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Pro | Glu | Ala | His | Gln | Asp | Ala | Phe | Lys | Thr | Gly | Phe | Ala | Glu | Gly | Phe |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Leu | Lys | Ala | Gln | Ala | Leu | Thr | Gln | Lys | Thr | Asn | Asp | Ser | Leu | Arg | Arg |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Thr | Arg | Leu | Ile | Leu | Phe | Val | Leu | Leu | Phe | Gly | Ile | Tyr | Gly | Leu | |
| | | 115 | | | | | 120 | | | | 125 | | | | |
| Leu | Lys | Asn | Pro | Phe | Leu | Ser | Val | Arg | Phe | Arg | Thr | Thr | Thr | Gly | Leu |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Asp | Ser | Ala | Val | Asp | Pro | Val | Gln | Met | Lys | Asn | Val | Thr | Phe | Glu | His |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Val | Lys | Gly | Val | Glu | Glu | Ala | Lys | Gln | Glu | Leu | Gln | Glu | Val | Val | Glu |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Phe | Leu | Lys | Asn | Pro | Gln | Lys | Phe | Thr | Val | Leu | Gly | Gly | Lys | Leu | Pro |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Lys | Gly | Ile | Leu | Leu | Val | Gly | Pro | Pro | Gly | Thr | Gly | Lys | Thr | Leu | Leu |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Ala | Arg | Ala | Val | Ala | Gly | Glu | Ala | Asp | Val | Pro | Phe | Tyr | Tyr | Ala | Ser |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Gly | Ser | His | Pro | Glu | Thr | Leu | Val | Lys | Val | Lys | Asp | Ala | | | |
| 225 | | | | | 230 | | | | | | 235 | | | | |

<210> 300

<211> 705

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (655)...(655)

<223> n= A, C, G or T

<400> 300

| | | | | | | | | | | | | |
|---------|------|---------|-------|--------|--------|--------|-------|--------|-------|--------|--------|-----|
| cttcagc | atc | ttttact | tttc | accagc | gttt | ctgggt | ggga | tccggg | gtgt | gttact | ggca | 60 |
| tctatg | gagt | agatg | taagt | aatg | ttgata | aacagc | cctat | aatgc | acagc | atagc | cctgac | 120 |
| ccccaa | aaga | agtata | catc | ccaga | aatatc | aatggt | acag | agatt | gagaa | aactct | catt | 180 |
| gagggc | ctag | ttgtat | ttct | tgttca | agac | aaggtt | acaa | catttc | caatt | aagaga | gttc | 240 |

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| agctctacaa | agaagtttta | gtcgacgcgg | ccgcgaattc | aagcttactc | ttcctttttc | 300 |
| aattcagaag | aactcgtcaa | gaaggcgata | gaaggcgatg | cgctgcgaat | cgggagcggc | 360 |
| gataccgtaa | agcacgagga | agcggtcagc | ccattcgccg | ccaagctctt | cagcaatatc | 420 |
| acgggtagcc | aacgctatgt | cctgatagcg | gtccgccaca | cccagccggc | cacagtcgat | 480 |
| gaatccagaa | aagcggccat | tttccaccat | gatattcggc | aagcaggcat | cgccatgggt | 540 |
| cacgacgaga | tcctcgccgt | cgggcatgcg | cgccttgagc | ctggcgaaca | gttcgggctgg | 600 |
| cgcgagcccc | tgatgctctt | cgtccagatc | atcctgatcg | acaaagaccg | gcttncatcc | 660 |
| gagtacgtgc | tcgctcgatg | cgatgtttcg | cttgggtggtc | gaatg | | 705 |

<210> 301

<211> 723

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (600)...(707)

<223> n= A, C, G or T

<400> 301

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cttcgcatct | tttactttca | ccagcgtttc | tgggtgggat | ccgagcataa | ataagacaga | 60 |
| gaaaatccat | ggatataagt | attcttgcag | gcaacaccac | atagacattt | agaaaattac | 120 |
| ttaagtgttt | tttgaatttt | tactttacat | gacttcatta | attgtacttc | cattaaagaa | 180 |
| gagtttgtaa | cacatctgta | aacaaaaaag | gcatatagca | ttctattctt | aatgaagaaa | 240 |
| gaacatattt | aaccacaaag | taaaggaata | atcacaataa | aaagaagagc | tttagctcat | 300 |
| gaatatatat | attgagtga | tgaataaata | tatggtcgac | gcggccgcga | attcaagctt | 360 |
| actcttcctt | tttcaattca | gaagaactcg | tcaagaaggc | gatagaaggc | gatgcgctgc | 420 |
| gaatcgggag | cggcgatacc | gtaaagcacg | aggaagcggg | cagcccatte | gccgccaagc | 480 |
| tcttcagcaa | tatcacgggt | agccaacgct | atgtcctgat | agcggtcgcg | cacaccacgc | 540 |
| cggccacagt | cgatgaatcc | agaaaagcgg | ccattttcca | ccatgatatt | cggcaagcan | 600 |
| gcatcgccat | gggtcacgac | gagatcctcg | ccgtcgggca | tgcgcgcctt | gagcctggcg | 660 |
| aacagttcgg | ctggcgcgag | cccctgatgc | tcttcgtcca | gatcatnctg | atcggcaaga | 720 |
| ccg | | | | | | 723 |

<210> 302

<211> 610

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (495)...(571)

<223> n= A, C, G or T

<400> 302

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| ggatccacag | agtgcggggg | cccctgccac | cactttcttg | gagcttttct | ctgtagtacc | 60 |
| caggagcaca | gtcctgacag | gagtgtcctg | cggtgccagg | aggacagaca | cagagctcca | 120 |
| acagcaatgc | cgcctcgccc | tcagcgggca | gctcgacagc | tttccggcca | acctccatgg | 180 |
| aaatgttggc | aattctgctc | tgctgcagtc | cctggccgta | tgatgctttg | atgaggatgt | 240 |
| agtcaatatt | gctgagaaca | gacataaaat | cagagtgtgt | gacgtgtttc | tcagacacgg | 300 |

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| agttaaaata | tttccagaat | tcaagcttac | tcttcctttt | tcaattcaga | agaactcgtc | 360 |
| aagaaggcga | tagaaggcga | tgcgctgcga | atcgggagcg | gcgataaccgt | aaagcacgag | 420 |
| gaagcgggtca | gcccattcgc | cgccaagctc | ttcagcaata | tcacgggtag | ccaacgctat | 480 |
| gtcctgatag | cggtncgcca | cacccagccg | gccacagtcg | atgaatccag | aaaagcggtc | 540 |
| attttccacc | atgatattcg | gcaagcaggc | ntcgccatgg | gtcacgacga | agatcctcgc | 600 |
| ccgtccggcg | | | | | | 610 |

<210> 303

<211> 606

<212> DNA

<213> Mus musculus

<400> 303

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|-----|
| ggatcccaat | acttcgacca | ggtgaccccc | tggtaaatgt | gtgtaagaca | tctacaaaat | 60 |
| cagcgtcatc | aggagaaagg | cgactggggg | cttctgcata | ctcaaagtta | ggcccagctg | 120 |
| gatccgaaca | accataacca | tccagaaatt | ttcttctggt | tcattgaaga | actgtctggt | 180 |
| cttctgtgtg | tgtaaagatt | ttgcaggttt | cgatgggcta | aaagtccttg | taaactgtac | 240 |
| aattgcttca | cataatccaa | catttctaata | tttttcattc | ttttctactt | catttggtatg | 300 |
| gtaaaacaga | attttatttt | cttcctctcc | cccgcggggc | cgaattcaag | cttactcttc | 360 |
| ctttttcaat | tcagaagaac | tcgtcaagaa | ggcgatagaa | ggcgatgcgc | tgcgaaatcgg | 420 |
| gagcggcgat | accgtaaagc | acgaggaagc | ggtcagccca | ttcgccgcca | agctcttcag | 480 |
| caatatcacg | ggtagccaac | gctatgtcct | gatagcggtc | cgccacaccc | agccggccac | 540 |
| agtcgatgaa | tccagaaaag | cggccatttt | ccaccatgat | attcggcaag | caggcatcgc | 600 |
| catggg | | | | | | 606 |

<210> 304

<211> 608

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (589)...(589)

<223> n= A, C, G or T

<400> 304

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| ggatcccaat | cctgctgctg | gagtgtcttc | gcaaaccctt | gctgtcgcct | ggaaaaaagt | 60 |
| gccaagctg | ctgacgcaaa | aagaaaaaaa | aaaagaaaga | aagatgctgc | tcattttgcat | 120 |
| gctcacttac | atatattttg | atgttcactg | accagcctg | agctctcccc | agcctcgtgg | 180 |
| gtgggtgactt | ttcctgcagg | gcgcacgccc | tgctgcagcc | ccctccccc | cgggcccga | 240 |
| ttcaagctta | ctcttccttt | ttcaattcag | aagaactcgt | caagaaggcg | atagaaggcg | 300 |
| atgcgctgcg | aatcgggagc | ggcgataaccg | taaagcacga | ggaagcggtc | agcccattcg | 360 |
| ccgccaagct | cttcagcaat | atcacgggta | gccaacgcta | tgtcctgata | gcgggtccgcc | 420 |
| acaccagcc | ggccacagtc | gatgaatcca | gaaaagcggc | cattttccac | catgatattc | 480 |
| ggcaagcagg | catcgccatg | ggtcacgacg | agatcctcgc | cgtcgggcat | gcgcgccttg | 540 |
| agcctggcga | acagttcggc | tggcgcgagc | ccctgatgct | cttcgtcana | tcatcctgat | 600 |
| cgacaagg | | | | | | 608 |

<210> 305

<211> 635

<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (596)...(635)
<223> n= A, C, G or T

<400> 305
ggatcccaat cctgctgctg gagtgctctc gcaaaccct gctgtcgcct ggaaaaaagt 60
gcccaagctg ctgacgcaaa aagaaaaaaa aaaagaaaga aagatgctgc tcatttgcac 120
gctcacttac atatatattgc atgttctactg acccagcctg agctctcccc agcctcgtgg 180
gtggtgactt ttcttgacagg ggcacagccc tgctgcagcc ccctcccccg cgggcccga 240
ttcaagctta ctcttccttt ttcaattcag aagaactcgt caagaaggcg atagaaggcg 300
atgcgctgcg aatcgggagc ggcgataccg taaagcacga ggaagcggc agccattcg 360
ccgccaagct cttcagcaat atcacgggta gccaacgcta tgcctgata gcggtccgcc 420
acaccagcc ggccacagtc gatgaatcca gaaaagcggc cattttccac catgatattc 480
ggcaagcagg catcgccatg ggtcacgacg agatcctcgc cgtcgggcat gcgcgccttg 540
agcctggcga acagttcggc tggcgcgagc ccctgatgct cttcgtccag atcatnctga 600
tcgacaagac cggctttcat tccgagtacg tgctn 635

<210> 306
<211> 635
<212> DNA
<213> Mus musculus

<400> 306
ggatcccaagc gggaaagggtg gcacagggtgc tattgtggaa tgccacggac ccggtgtcga 60
ttccatctcc tgcactggca tggcaactat ctgcaacatg ggtgcagaaa ttggggccac 120
tacatcagtg ttccataaca accacaggat gaaaaagtac ctgagcaaga caggccgaac 180
agacattgcc aacctagcag aagaattcaa gcttactctt cctttttcaa ttcagaagaa 240
ctcgtcaaga aggcgataga aggcgatgcg ctgcgaatcg ggagcggcga taccgtaaag 300
cacgaggaag cggtcagccc attcgccgcc aagctcttca gcaatatcac gggtagccaa 360
cgctatgtcc tgatagcggc ccgccacacc cagccggcca cagtcgatga atccagaaaa 420
gcggccattt tccaccatga tattcggcaa gcaggcatcg ccatgggtca cgacgagatc 480
ctcgccgtcg ggcgatgcgc ccttgagcct ggccaacaag ttcggctggc gcgagcccct 540
gatgctcttc gtccagatca tcctgatcga caaagaccgg ctttcatccg agtacctgct 600
cgctcgatgc gatgtttcct tggggggcga atggg 635

<210> 307
<211> 635
<212> DNA
<213> Mus musculus

<400> 307
ggatccctcg gtgaaagggtg gcacagggtgc tattgtggaa taccacggac ccggtgtcga 60
ttccatctcc tgcactggca tggcaactat ctgcaacatg ggtgcagaaa ttggggccac 120
tacgtcagtg ttccataaca accacaggat gaaaaagtac ctgagcaaga caggccgaac 180
agacattgcc aacctagcag aagaattcaa gcttactctt cctttttcaa ttcagaagaa 240
ctcgtcaaga aggcgataga aggcgatgcg ctgcgaatcg ggagcggcga taccgtaaag 300

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| cacgaggaag | cggtcagccc | attcgccgcc | aagctcttca | gcaatatcac | gggtagccaa | 360 |
| cgctatgtcc | tgatagcggg | ccgccacacc | cagccggcca | cagtcgatga | atccagaaaa | 420 |
| gcggccattt | tccaccatga | tattcggcaa | gcaggcatcg | ccatgggtca | cgacgagatc | 480 |
| ctcgccgtcg | ggcatgcgcg | ccttgagcct | ggcgaacagt | tcggctggcg | cgagcccctg | 540 |
| atgctcttcg | tccagatcat | cctgatcgac | aagaccggct | ttcattccga | gtacgtgctc | 600 |
| gctcgatgcg | atgtttcgct | tggtggtcga | atggg | | | 635 |

<210> 308

<211> 635

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (524)...(524)

<223> n= A, C, G or T

<400> 308

| | | | | | | |
|-------------|------------|-------------|------------|-------------|------------|-----|
| ggatccctgc | ggccactgcc | cagagagaat | cgttacaatc | acaggcccaa | ctgacgccat | 60 |
| cttcaaggcc | tttgctatga | tcgcgtacaa | gtttgaggag | gacatcatta | attccatgag | 120 |
| caacagcccc | gccccgcg | gccgaattc | aagcttactc | ttcctttttc | aattcagaag | 180 |
| aactcgtcaa | gaaggcgata | gaaggcgatg | cgctgcgaat | cgggagcggc | gataccgtaa | 240 |
| agcacgagga | agcggtcagc | ccattcgccg | ccaagctctt | cagcaatatc | acgggtagcc | 300 |
| aacgctatgt | cctgatagcg | gtccgccaca | cccagccggc | cacagtcgat | gaatccagaa | 360 |
| aagcggccat | tttccaccat | gatattcggc | aagcaggcat | cgccatgggt | cacgacgaga | 420 |
| tcctcgccgt | cgggcatg | cgcccttgagc | ctggcgaaca | gttcggctgg | cgcgagcccc | 480 |
| tgatgctctt | cgtccagatc | atcctgatcg | acaagaccgg | cttnccatccg | agtacgtgct | 540 |
| cgctcgatgc | gatgtttcgc | ttggtggtcg | aatgggcagg | tagccggatc | aaagcgtatg | 600 |
| cagcccgcgcg | cattgcatca | gccatgatgg | atact | | | 635 |

<210> 309

<211> 631

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (580)...(597)

<223> n= A, C, G or T

<400> 309

| | | | | | | |
|------------|-------------|------------|------------|------------|-------------|-----|
| ggatccgaca | ccgtcttctg | gcttccacag | gcgcccattc | acaatgtgtg | gcacacatat | 60 |
| ctagaaacat | agacatatga | agaaaataaa | aataactcgg | tagagctggg | cattgtggta | 120 |
| catattttta | gtcctagcat | ttgggagaca | acagaaagcg | gagcgctgtg | ggctcaaatac | 180 |
| tagcctgatc | cacatgggtga | gtgagttcta | ggccaaccga | ggatgagaac | ttgtctcaaa | 240 |
| acagttttta | aagaaaatac | tctagaataa | aacagaacta | agcaccacca | ccagtagagt | 300 |
| gcacagaaat | aagacacact | ggtgctgaat | atttcatagc | ctgtgtgtgt | ctgtccttcc | 360 |
| tttcctttat | gttttttttt | gagacagggt | ttctctgtgt | agccctggct | gttctggaac | 420 |
| tcactctgta | gaccatgctg | gcctcaaact | cagaaatttg | cctgcctctg | cctcccaagt | 480 |
| gctgaaatga | aaggtgtgtg | cactacgtgt | ttcttttctt | tttaattaac | taattaatta | 540 |

acatctcaaa cactgggtcc cccttcgtgg taccctctn acagagtcce ttccctnccc 600
tctttctttc tctgtgaga gtgtgcccgc g 631

<210> 310

<211> 603

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (512)...(597)

<223> n= A, C, G or T

<400> 310

```

ggatccgacc ccctgccgtt ctctatgtgc ttctatgagg gttactatga tgaaaataga 60
gcagaagata gtgtgaagta acattggcaa ctgtaatgtg tccatttaac ttatTTTTat 120
agcacttagg caatattgtt agtcttagtg agtagttcac atctttacaa aagcatgctc 180
tccctatcca ttgggccccc aataacactc tctttgaggc cattctgaat cctgtctcgt 240
gtaacgataa tatattatga aaacagatac tttaagaatt tctgtacag cagtcagttg 300
tttattctct ctctctctct ctctctctct ctctctctct ctctctctct cctcggggcc 360
caatcccgcg ggcctgaatt caagcttact ctcccttttt caattcagaa gaactcgtca 420
agaaggcgat agaaggcgat gcgctgcgaa tcgggagcgg cgataccgta aagcacgagg 480
aagcggtcag cccattcgcc gccaaagctct tnagcaatat cacgggtagc caacgctatg 540
tctgatagc ggccgncaca cccagccggn cacagtcgat gaatccagaa aagcggncat 600
ttt 603

```

<210> 311

<211> 608

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (489)...(596)

<223> n= A, C, G or T

<400> 311

```

ggatccgcat ggcattgatc cgatttgga cattgcaacc aacaagctga ccttcctcaa 60
ctccttcaag atgaagatgt ctgttatcct cggcatcatc cacatgctgt ttggagtcag 120
cctgagcctt ttcaaccata tctatttcaa gaagcccctg aacatctact ttggccttat 180
tcttgagatc atcttcatgt cctcgttggt tggctacctg gtcatcctta tcttttacia 240
gtggacagcc tacgatgcc actcgtctag gaatgccccg agcctcctga tccacttcat 300
aaacatgttc ctcttctcct acccagagtc tggtaatgca atgctgtact ctggacagaa 360
aggaattcaa gcttactctt cctttttcaa ttcagaagaa ctctgcaaga aggcgataga 420
aggcgatgcg ctgcgaatcg ggagcggcga taccgtaaag cacgaggaag cggtcagccc 480
attcgccgnc aagctctttc agcaatatca cgggtagcca acgctatgtc ctgatagcgg 540
gccgccacac ccagccgggc acaggtcgat gaattcagaa aagcgggccca tttttncacc 600
atgatatt 608

```

<210> 312

<211> 637
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (117)...(627)
<223> n= A, C, G or T

<400> 312
ggatccgccc ggggtcagaa gccatggagt cagcattatc accaaggata ttattgaata 60
cccaaataaa acgaactgat acatatttct ccaaaacctt cacaagaagt cgactgnntt 120
cttttagtagg ctaacttttt aaacattcca caagaggaag tgcccgcggg cctgaattca 180
agcttactct tcctttttca attcagaaga actcgtcaag aaggcgatag aaggcgatgc 240
gctgcgaatc gggagcggcg ataccgtaaa gcacgaggaa gcggtcagcc cattcgccgc 300
caagctcttc agcaatatca cgggtagcca acgctatgtc ctgatagcgg tccgccacac 360
ccagccggcc acagtcgatg aatncagaaa agcggncatt ttccaccatg atattcggca 420
agcaggcatc gccatgggtc acgacgagat cctcgccgtc gggcatgcgc gccttgagcc 480
tggcgaacag ttcggctggc gcgagcccct gatgctcttc gtccagatca tcttgatcga 540
caaagaccgg nttncatccg agtaccgtgc tcgctcgatg cgangtttcg cttgngngtn 600
naatgggcag gttagnccgg atcaagncta tgcagcc 637

<210> 313
<211> 607
<212> DNA
<213> Mus musculus

<400> 313
ggatccggca ggaagaggcc aggcagatgc agaagcagca gcagcagcaa caacaacaac 60
aacagcaaca ccagcaatca aacagagccc ggaacagcac acattccaac ctgcatacca 120
gccttgggaa ttcaagctta ctcttccttt ttcaattcag aagaactcgt caagaaggcg 180
atagaaggcg atgcgctgcg aatcgggagc ggcgataccg taaagcacga ggaagcggtc 240
agcccattcg ccgccaagct cttcagcaat atcacgggta gccaacgcta tgtcctgata 300
gcggtccgcc acaccagcc ggccacagtc gatgaatcca gaaaagcggc cttttccac 360
catgatattc ggcaagcagg catcgccatg ggtcacgacg agatcctcgc cgctcgggcat 420
gcgcgccttg agcctggcga acagttcggc tggcgcgagc ccctgatgct cttcgtccag 480
atcatcctga tcgacaagac cggcttcacg cgagtacgtg ctcgctcgat gcgatgtttc 540
gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg cattgcatca 600
gccatga 607

<210> 314
<211> 633
<212> DNA
<213> Mus musculus

<400> 314
ggatccggtc agaagccatg gagtcagcat tatcaccaag gatattattg aataccctaaa 60
taaaacgaac tgatacatat ttctccaaaa ccttcacaag aagtcgactg ttttcttttag 120
taggctaact ttttaaacad tccacaagag gaagggcccc cggggccgaa ttcaagctta 180
ctcttccttt ttcaattcag aagaactcgt caagaaggcg atagaaggcg atgcgctgcg 240

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| aatcgggagc | ggcgataccg | taaagcacga | ggaagcggtc | agcccattcg | ccgccaagct | 300 |
| cttcagcaat | atcacgggta | gccaacgcta | tgtcctgata | gcggtccgcc | acaccagcc | 360 |
| ggccacagtc | gatgaatcca | gaaaagcggc | cattttccac | catgatattc | ggcaagcagg | 420 |
| catcgccatg | ggtcacgacg | agatcctcgc | cgtcgggcat | gcgcgccttg | agcctggcga | 480 |
| acagttcggc | tggcgcgagc | ccctgatgct | cttcgtccag | atcatcctga | tcgacaagac | 540 |
| cggcttccat | ccgagtacgt | gctcgtcga | tgcgatgttt | cgcttggtgg | tcgaatgggc | 600 |
| aggtagccgg | atcaagcgta | tgcagcccgc | cgc | | | 633 |

<210> 315

<211> 631

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (7)...(631)

<223> n= A, C, G or T

<400> 315

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|-----|
| ggatccnttg | ngggnnatna | ccnnnggagn | naccatnatn | annaaggata | tnatatgaat | 60 |
| acccaagatc | attggncntg | atgngtatgt | tctnnacaac | ctntatatga | ancagactgc | 120 |
| nnnntntnat | nngcnaantt | nnnaanngtt | acncaagang | aantgtccnt | tnnccnatat | 180 |
| tcaagntnnc | tnttcntttg | tnantnaagn | ngancnnctg | nanatngcga | ncgaagggtgn | 240 |
| ngcgctgcnn | anngnnancg | gcnatccctt | nnannacgag | gnatnggnca | gtctattngc | 300 |
| nggccanctc | tttntcntna | tnnccgggtcg | ccannnctat | gngctnanag | cggatnnana | 360 |
| cacncangcg | gccannntcc | atnatnanat | nnnngcggcc | ntnttccacc | nngatntnna | 420 |
| nnagnnnctc | atcgtcatgn | ntgcnacctn | ntccttggcg | accngcatgc | gctgctngag | 480 |
| ccngtgatnc | agttcggctg | gancnngctn | ntgangctgt | tcgnentgan | tatcctganc | 540 |
| nacatgatcg | gtnnngatgn | agttcgnngct | cgctntntgc | gatgtttccg | ttgaaggngct | 600 |
| antgggcngg | tnnattggat | caagccattg | n | | | 631 |

<210> 316

<211> 607

<212> DNA

<213> Mus musculus

<400> 316

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| ggatcctaac | ctcacagctg | aaagcagcca | tagcagaatg | caggccagag | aacgaacttt | 60 |
| agaaataacc | cacctacttg | tgtctgggga | attcaagctt | actcttcctt | tttcaattca | 120 |
| gaagaactcg | tcaagaaggc | gatagaaggc | gatgcgctgc | gaatcgggag | cggcgatacc | 180 |
| gtaaagcacg | aggaagcggg | cagcccattc | gccgccaagc | tcttcagcaa | tatcacgggt | 240 |
| agccaacgct | atgtcctgat | agcggtccgc | cacaccagc | cggccacagt | cgatgaatcc | 300 |
| agaaaagcgg | ccattttcca | ccatgatatt | cggcaagcag | gcatacgccat | gggtcacgac | 360 |
| gagatcctcg | ccgtcgggca | tgcgcgcctt | gagcctggcg | aacagttcgg | ctggcgcgag | 420 |
| cccctgatgc | tcttcgtcca | gatcatcctg | atcgacaaga | ccggcttcca | tccgagtacg | 480 |
| tgctcgctcg | atgcgatgtt | tcgcttggtg | gtcgaatggg | caggtagccg | gatcaagcgt | 540 |
| atgcagccgc | cgcattgcat | cagccatgat | ggatactttc | tcggcaggag | caaggtggga | 600 |
| tgacagg | | | | | | 607 |

<210> 317

<211> 225
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (13)...(204)
<223> n= A, C, G or T

<400> 317
ggatcctcac tgnncggcaa aatgccgcaa aaaaggggaat aagggcgaca cggaaatggt 60
gaatactcat actcttcctt tttcaatatt attgaagcat ttatcagggt tattgtctca 120
tgagcggata catatttgaa tgtattctgc agaagaacat gtgagcaaaa ggccagcnaa 180
aggcctnnaa ccggaaaaag gccncgctgc tggctttttt ccata 225

<210> 318
<211> 633
<212> DNA
<213> Mus musculus

<220>
<221> unsure
<222> (8)...(630)
<223> n= A, C, G or T

<400> 318
ggatcctnac tgnncggcaa ancgccgcaa aaaaggggaat gggggctgac acgganatgt 60
ttgaatactc atactcttcc tttnttanta ttnttgaann nttntcnnng nntattggnt 120
natgagcgga tacntatttg aatgtattct gcataagaac atgtgagcaa aaggccagca 180
naaggccngg aaccggaaaa aggccgngtt gctggcgttt ttccataggc tccgaccccc 240
tgacgagcat canaaaaatc gacgctcaat tcagatgtgg caaaccggac tggactataa 300
agataccagg cgtttacccc tgnnanctcc ctagtncgct ntctgttnc gnccctgccg 360
cttaccggat acctgtccgc ctttctccct tcgggaagcg tggcgctttc tcatagctca 420
cgctgtatgt ntctcangtc ggtgtaggta ngntcgctcc aatctgggct gngtgcacga 480
accnccggt cancccgacc gctgngcctt atccggaaac tatcntattg agttcacccg 540
gnaagacacc acttatnttc ctgcagnagn cactggtnac atgattatna nancgaggtg 600
tttnngcngg tctncaagnn ttcnttgaan ttt 633

<210> 319
<211> 645
<212> DNA
<213> Mus musculus

<400> 319
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atttggtcat ctctaaaaag tgcacctggt tgacctaat ctgctcgaat taaaatactt 180
agtgcagtac ccactattcc cgcgggcccg aattcaagct tactcttcct ttttcaattc 240
agaagaactc gtcaagaagg cgatagaagg cgatgcgctg cgaatcggga gcggcgatac 300
cgtaaagcac gaggaagcgg tcagcccatc cgccgccaag ctcttcagca atatcacggg 360

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| tagccaacgc | tatgtcctga | tagcgggtccg | ccacacccag | ccggccacag | tcgatgaatc | 420 |
| cagaaaagcg | gccattttcc | accatgatat | tcggcaagca | ggcatcgcca | tgggtcacga | 480 |
| cgagatcctc | gccgtcgggc | atgcgcgcct | tgagcctggc | gaacagttcg | gctggcgcca | 540 |
| gcccctgatg | ctcttcgtcc | agatcatcct | gatcgacaag | accggcttcc | atccgagtac | 600 |
| gtgctcgctc | gatgcgatgt | ttcgcttggt | ggtcgaatgg | gcagg | | 645 |

<210> 320

<211> 289

<212> DNA

<213> Mus musculus

<400> 320

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gaattcgcgg | ccgcgtcgac | gccaagactt | cacacagttc | tgattgtccc | agaagccttg | 60 |
| cgtttgtcaa | aacatgacaa | tgagatatga | aaacttccag | aacttggagc | gggaagagaa | 120 |
| aaaccaggag | atgagaaatg | gtgacaagaa | aggaggaatg | gagtctccaa | agtttgctct | 180 |
| aattccttcc | cagtccttcc | tgtggcgcat | cctctcttgg | accacctcc | tcctgttctc | 240 |
| cctgggcctc | agcctcctgc | tactggtggt | catctccgtg | attggatcc | | 289 |

<210> 321

<211> 684

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (124)...(153)

<223> n= A, C, G or T

<400> 321

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| acctcagtga | tgtgcaaggg | tgatcaatga | tcggtgagtc | tctctcatct | cagtgtgtgg | 60 |
| agtgcaagag | tagagaactc | agatgccaac | taattcttga | gcatggataa | ccaaatttca | 120 |
| gggnaggagc | cgttttcaat | agctaaaagt | gcntgagtta | taatcacctt | gtcacgtttt | 180 |
| ggttgggttc | tgaatttgca | taccaaccag | agcatgaaca | ccagtccaca | gcatatggca | 240 |
| gcaccaaaca | aatcactcc | caccatttcc | ttaaagtaag | aaaaagcaga | ggtaagccaa | 300 |
| gaggtaaagt | ctccgagggt | caactggttc | actctggtcc | cattaaggct | caggatctgc | 360 |
| atctgcagtc | tcgtctgcaa | cctttccagc | tcctgcgacc | agttcccctt | caggtaactc | 420 |
| gataggtctg | tacttttaat | aaaagaatta | ttaatatata | tattgggagt | aatgcacaca | 480 |
| tgcaaagtgg | atgccacaca | actcatttgt | atgacatcca | tcactctgtc | catgtcatgt | 540 |
| tgtaaaatat | ccactctgat | tcactaacat | taaccctgag | gtgatatgag | aatccaccct | 600 |
| ttgcagggta | agcaatgcct | cagacgtttt | ttctgctatc | tgacttatag | tgtcagcagt | 660 |
| attaatttga | tctgccctgg | atcc | | | | 684 |

<210> 322

<211> 719

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (628)...(666)

<223> n= A, C, G or T

<400> 322

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ttgctaataa caaagcaaat gtctttcaat attcacaacc ttaaaattat atccaagaaa 120
acaaaggata aataattttt tataaaaata attacttctc aaataacggt tcacaataga 180
cctgctcaat acatcgatct gactcatctc atctgtgccg cttttcttct ttttaaaatt 240
ctggcctggg acaaaactac atgaaagaaa gtaccattaa attaaggggt actttccaaa 300
aaacaataga aaaatcttaa aagtaaattc acttatatat aaaatattaa ggcctctgca 360
tgagaacggt ttaacatctg ggggaactggc ctttcctaac tgacctatga cccactcac 420
ctcaaacttc agaatgaaag gttctggagt gaaaagtcct ttttaattttg ccaatacatg 480
aaattacaca taaaattaca ctgcaaagta atatgtactt aacaaatgat atattgaaaa 540
gtctaacttt ctgctggcta atttcagtat ggacttcaga tcaagtatag tgtattttca 600
gccatatctc ataatctttt gcgacgcngn cgcggaattca agcttactct tncctttttca 660
attcanaaga actcgtcaag aaggcgatag aaggcgatgc gctgcgaatc gggagccgg 719
```

<210> 323

<211> 655

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> (16)...(85)

<223> n= A, C, G or T

<400> 323

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caccntnttt gacntaagac ctcantaggc cccgcctcta aaggtttctg acctcaatag 120
gccttcctgg agaactagtt tctaactctc aggcccttgg gacattgcat ctgagtagta 180
ggtgcctctc tacctgtgtt tggcttggtc atgattggca gacactctgc ctggctctgc 240
acagcagcgg ctgagcatca gcatccagct gcttgctgtg tgtagttgt ctcacagctg 300
agggctctgc ctgggtact tcaggctttc cggttaggaa gataatttgg tcacttgtgt 360
ctgtggccac tcttagaatt ttctcttttg agggaacctg tgactggttg gcttttgcac 420
tctatggagg gagatgggt taaagactgt ggcaacacac accctccaga agagctggga 480
ccagagactg tcagcacaga aaggacaatg tcttttttag tagctgtggc agacttgagt 540
tgctgtaatt tatacaaatt gtttagaatg gttttttaaga ctaagaaggg aaatataact 600
attgcacaag acttttataa ttactatact taaattatgc tctatgtggg gatcc 655
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<210> 324

<211> 677

<212> DNA

<213> Mus musculus

<220>

<221> unsure

<222> 1

<223> n= A,C, G or T

<400> 324

| | | | | | | |
|------------|-------------|-------------|------------|-------------|-------------|-----|
| ncgctgtagt | ttcattttctc | acttttgaggg | cacagatgaa | aatgtatatc | gcaacacagt | 60 |
| ggatatcagc | ccaagcacga | agaccatgct | gaacatgcac | ccgtacagag | tgtacttaaa | 120 |
| ggagtcgtca | taagggcact | gggagccatt | ggagcttacc | attgtcaggc | agtgcagctt | 180 |
| acaggaggcc | ttttgtccgc | agcgcttgat | cgatcgccct | tgctattcag | atgtggtcac | 240 |
| agcagcagcc | agttttatttg | caaagtattt | gtttcttttc | ctggttcttac | aaatactttc | 300 |
| ttctcttaac | tcttcaaagg | aaacatgaaa | tgtgttccgt | aaaagtttct | agtagattat | 360 |
| tcaggaaaat | agtctgattt | tctggtcgag | aaaatccatg | agtctggagt | ttagttaact | 420 |
| gacagaaaat | gcagtcaagg | aagccaaccc | ataaagctga | aagtgtaagg | aaaaactgtt | 480 |
| ccaagtcgga | ccagaccagt | ccgcgtggaa | acttgtgctt | cagccgccag | ggcctcaaacc | 540 |
| agctttactt | cagtcacaaa | cactcgccgt | gcgtccgtcc | gcccgtcgtc | ctcgggtact | 600 |
| tcttccttct | ttttattctc | aaactttgta | tttctacatt | gattccggac | ggcgataggc | 660 |
| agtcgtttaa | gggatcc | | | | | 677 |